



COUNTY BOROUGH OF SOUTH SHIELDS.



**ANNUAL REPORT OF THE
MEDICAL OFFICER OF HEALTH,
1921**

W. CAMPBELL LYONS,
M.B., CH.B., D.P.H.

CHAIRMEN OF COMMITTEES.

Health Committee—ALDERMAN W. L. ROBERTSON.

Hospital and Sanatorium Sub-Committee—ALDERMAN W. L. ROBERTSON.

Maternity and Child Welfare Committee—COUNCILLOR DRUERY.

Venereal Diseases Sub-Committee—COUNCILLOR SUTCLIFFE, L.D.S.

Slaughterhouses Sub-Committee—ALDERMAN RICHARDSON.

Education Committee—ALDERMAN HILTON.

Medical Inspection of School Children Sub-Committee—COUNCILLOR LAWSON.

STAFF OF PUBLIC HEALTH DEPARTMENT.

Post or Appointment.	Name.	Qualifications.
* Medical Officer of Health, Chief Tuberculosis Officer, Principal School Medical Officer, Bacteriologist, etc.	W. Campbell Lyons	M.B., Ch.B., (Edin.) D.P.H.
Assistant Medical Officer of Health and Tuberculosis Officer, Resident Medical Officer, Cleadon Park Sanatorium, Deputy Medi- cal Officer of Health	A. H. Wear	M.B., B.S., D.P.H. B.Hy.
Assistant Medical Officer (Maternity and Child Welfare & School Medical Inspection)	Dorothy O. S. Blair..	M.B., B.S.
Clinical Medical Officer, Venereal Diseases.....	A. B. McAulay Lang	M.A., M.B., Ch.B., (Glasgow).
Assistant School Medical Officer	J. G. Walker	M.R.C.S., (Eng.), L.R.C.P. (Lond.)
Operating Surgeon, School Sur- gical Clinic.....	R. Crosby †	M.B., B.S., M.R.C.S.
School Dental Officers.....	P. W. Diaek †	L.D.S.
	G. G. Robertson † ..	L.D.S.
Borough Analyst	J. T. Dunn †	D.Sc., F.I.C.
Superintendent of Public Abattoir, and Inspector under the Food & Drugs Acts, etc.	M. J. Pollock .....	....

Staff of Public Health Department.—*Continued.*

Post or Appointment.	Name.	Qualifications.
District Sanitary and Housing Inspectors, etc.	W. Clark	Certificate R.S.I.
	R. W. Weir	Do.
	R. Ayre	Do.
	W. Hill.....	Do.
Inspector under the Shops Acts	W. Smith.....	Do.
Inspector of Midwives.	Miss J. Errington ..	Hospital Trained and C.M.B. Certificate.
Health Visitors, etc.	Miss P. M. Winter ..	Hospital Trained.
	Miss L. O. Lowery ..	Do.
	Miss C. Hopper	Do.
	Mrs. M. W. Arthur ..	Hospital Trained and C.M.B. Certificate.
	Miss A. Smyth.....	Do. do.
	Miss L. Donald	Do. do.
	Mrs. E. G. Lee.....	Do. do.
	Miss M. I. Wigham ..	Do. do.
		and H.V. Certificate
Chief Clerk.....	Mrs. J. Leete .....	.....
Clerks	J. Yeoman	Certificate R.S.I.
	C. Hymers .....	.....
	J. Hilton .....	.....
	G. A. Campbell ....	.....
	F. H. Day.....	.....
	H. Eardley .....	.....
	Miss M. Shorey ....	.....
	Miss G. C. Cooper ..	.....
	Miss E. Park .....	.....
Laborant	W. Combey .....	.....
Matron, Deans Isolation Hospital	Miss H. Powell Evans	General and Fever Trained.
Sister-in-Charge, Cleadon Park Sanatorium	Miss L. Allison	Hospital Trained.
V.D. Clinic Nurse.....	Miss K. Nixon.....	Hospital Trained and C.M.B. Certificate.
T.B. Clinic Nurse	Mrs. T. Tubb	Do.

* Also Medical Officer to North East Durham Joint Smallpox Hospital Board.

† Part-time Officials, also in private practice.

Contribution is made by Exchequer Grants, &c., towards the salaries of all the above-mentioned members of the staff with the exception of the Public Analyst, the Shops Inspector, and the Matron of the Isolation Hospital.

CONTENTS.

	PAGE.
Chairmen of Committees	2
Staff of Public Health Department	2
Summary of General and Vital Statistics	5
Preface	6
Vital Statistics	9
Notifiable Diseases	26
Certain Non-notifiable Diseases	29
Isolation Hospitals	30
Nursing Arrangements, &c., available in the District.....	32
Tuberculosis	34
Veneral Diseases	39
Maternity and Child Welfare.....	46
School Medical Service	54
Sanitary Administration	74
Housing	84
Food	87
Meteorology	93

SUMMARY OF GENERAL AND VITAL STATISTICS.

Area of Borough (before extension of 1st Nov., 1921)	2,405 acres.
Population at 1921 Census (before extension)	116,667
Population, mid-year 1921 (as adjusted for holiday movement at time of Census; Registrar-General's estimate)	118,400
Density of population per acre	49
No. of insured persons, December, 1921	47,724
No. of inhabited houses in 1921	approx. 15,000
No. of families or separate occupiers in 1921	approx. 25,000
Rateable value for Poor Rate at April, 1921	£491,421
Sum represented by a penny rate	£1,810
Births during 1921, 3,507.	Birth-rate, 29.6
Deaths during 1921, 1,801.	Death-rate, 15.2
Infant mortality rate—96.	
Tuberculosis death-rate: Pulmonary	1.44
Non-pulmonary	0.36

Note re added area.

The Borough was extended on 1st November, 1921, by the inclusion of a portion of the South Shields Rural District. The following is a summary of the statistics for the "added area" :—

Population at 1921 Census (including 893 persons in Harton Institution)	1,964
Population mid-year 1921 (adjusted for holiday movement: Registrar General's estimate)	1,976
Area	778 acres.
No. of insured persons, December, 1921	76
No. of inhabited houses in 1921	approx. 240
Rateable value for Poor Rate at November, 1921	£11,222
Sum represented by a penny rate	£44
Births since 1st November, 1921	4
Deaths „ „	1

<i>Cause.</i>	<i>Age.</i>	<i>Sex.</i>
Senility	81	F.

Infectious Diseases notified since 1st November, 1921—
Scarlet fever—2 cases.

For convenience and for purposes of comparison the vital statistics of the added area have not been included in the statistics for the Borough for 1921.

To the Chairman and Members of the Health Committee.

MR. CHAIRMAN AND GENTLEMEN,

I have the honour to present the 47th Annual Health Report. At the suggestion of the Ministry of Health, complete surveys of the subject will, in future, be made once in five years: the report is therefore again considerably curtailed.

The boundaries of the Borough were extended as from 1st November, 1921, by the South Shields Corporation Act, 1921. An area of 778 acres has been added.

The census was taken on June 19th, and the population was declared to be 116,667, and that of the added area, 1964, a total of 118,631. It was found, however, that on account of the early summer a certain holiday movement had occurred throughout the country—as a fact the census was taken at the beginning of Race Week, which is always a holiday week in South Shields—it was therefore necessary to revise the figures. I am informed by the Registrar-General that the population officially allocated to the Borough as extended is 120,376. On this estimation, and in spite of the extension, South Shields is one of the most densely populated towns in England and Wales, the density of the population being nearly 38 persons per acre.

There has been a marked fall in the birth rate. That for 1921 was 29.6 births per 1,000 of the population, as compared with 34.2 in 1920.

The death rate was the lowest recorded for the Borough, and was 15.2 deaths per 1,000 of the population. This figure has been equalled only once, in 1910. At the same time the death rate is high in comparison with that for the County Boroughs generally in England and Wales. The death rate from pulmonary diseases (except tuberculosis) was the lowest recorded in the Borough, and was 2.12 per 1,000 of the population. The tuberculosis death rate was 1.80 deaths per 1,000 of the population, as compared with 1.76 for 1920.

The deaths among infants under one year numbered 96 per 1,000 births—the smallest infant mortality rate yet recorded for South Shields. I feel sure that the activities undertaken under the Council's Maternity and Child Welfare scheme have contributed in no small measure to this satisfactory reduction.

A sharp outbreak of scarlet fever occurred in the Autumn; in all 601 cases were notified. The accommodation at the Isolation Hospital being totally inadequate for the needs of the Borough, and it having become evident that the sanction of the Ministry of

Health to proceed with the erection of the new hospital and sanatorium would not be forthcoming, it was necessary to provide additional accommodation of a temporary character in army huts.

The duty of providing treatment for insured persons suffering from tuberculosis was transferred from the Health Insurance Committee to the Council in May, and it was found necessary to make provision for early cases in the Mansion House at Cleadon Park. With little alteration, accommodation was made for 22 men and 7 women, and it is hoped that it may soon be possible to arrange for the treatment of a number of children in the same building.

At the end of the year there were known to be 1,599 cases of tuberculosis in the Borough. Since many of these patients live under conditions conducive to the spread of the disease, institutional provision, especially for advanced cases, is a matter of urgency, otherwise the efforts to reduce the incidence of the disease are severely handicapped.

The responsibilities of the Council with regard to the diagnosis and treatment of disease have increased enormously in recent years until at present a huge municipal out-patient department is being maintained. There can be no doubt that the schemes are productive of much good, and that the recognition and treatment of certain diseases in the early stages tend to lower the incidence of those diseases, but in the development of such schemes there is just a danger that too much attention may be devoted to the purely therapeutic rather than the preventive aspect.

A great amount of work has been carried out in the various clinics during the year, and while the number of attendances is no criterion by which to gauge the value of the work, still the attendances serve to indicate to some degree its extent. The total number of individuals who attended the clinics provided by the Council was 14,000, the number of attendances was 62,000.

The Maternity and Child Welfare Scheme, including as it does the notification of births, supervision of midwives, the welfare centres, home visiting of expectant and nursing mothers and infants, the provision of medical help in cases of abnormal parturition, investigation of infant deaths, the supply of milk, etc., involves a large amount of work. As one instance of the value of the scheme, the reduction of the number of cases of ophthalmia neonatorum might be cited. During 1921 there were 26 cases notified, and in no instance was there any damage to the eyes. From an economic standpoint alone, this marks a great advance, when it is remembered what it costs to educate a blind or partially blind child as compared to the cost of a child having its eyesight.

An additional Maternity and Child Welfare Clinic was established in November in a building adjoining St. Hilda's school and in a district in which there are a large number of mothers and infants who probably would not attend the Town Hall Clinic.

The work of the school medical service showed a marked increase on that for previous years. No less than 13,000 children out of an average school attendance of 20,000 passed through the hands of the Medical Officers. The system of cleanliness surveys is acknowledged to have resulted in a great improvement in the cleanliness of the children generally. The appointment in August last of an additional part-time dentist will ensure that a larger number of children will have the necessary dental treatment.

One of the most pressing problems confronting the Corporation is the shortage of housing accommodation and consequent overcrowding. Until the complete census figures are available it will not be possible to fully appreciate how acute the shortage is and it is doubtful if the completion of even the whole of the 1,360 houses on Cleadon Park Estate will materially relieve the congestion.

A great deal of work is involved in the sanitary inspection of the district. Dilapidations which had occurred during and immediately after the war, overcrowding and the resultant damage to property, together with additional regulations and legislation have considerably increased the duties of the Sanitary Inspectors in recent years.

Unemployment and trade depression are not as a rule subjects which require comment in health reports but there is no doubt that as long as unemployment and consequent poverty continue many people become careless. Poverty and dirt invade a house as an unholy pair. Subsistence is paramount, and with the edparture of treasures in exchange for food and necessities, there goes the incentive to cleanliness. The long-delayed passing of hard times will, I hope, synchronise with a general desire for brighter and cleaner homes and surroundings.

To my staff, for their willing help during a year of hard work, I have pleasure in recording my grateful thanks.

I am,

Mr. Chairman and Gentlemen,

Yours faithfully,

W. CAMPBELL LYONS,

MEDICAL OFFICER OF HEALTH.

VITAL STATISTICS.

(A) POPULATION.

The Census, which was to have been taken on April 24th, was postponed until 19th June, 1921. The official figures for South Shields were 116,667.

It was found, however, that on account of the abnormally early summer a good deal of holiday movement had occurred, and it was necessary to make certain adjustments.

The Registrar-General's revised population for the County Borough, as constituted before 1st November, 1921, was 118,400, and that for the Borough as extended on 1st November, 1921, 120,376.

For the purposes of this report the birth and mortality rates are calculated on the revised population for the Borough as before extension, viz., 118,400.

(B) BIRTHS.

Birth-rate.

The number of births registered during the calendar year 1921, in the Borough (as constituted before the extension on 1st November last) was 3,464. To this number has been added 45 inward transfers, that is, births in Harton Institution and elsewhere of children whose mothers were residents of the Borough. On the other hand, there has been deducted 2 births which occurred in the town among non-residents. The total number of births was thus 3,507, corresponding to an annual birth-rate of 29.6 per 1,000 of the population.

The annual rates since 1871 are shown in the table on page 25.

The number of births reported to the Health Department under the Notification of Births Acts, etc., is referred to on page 46.

Distribution (Sexes : Legitimacy).

The distribution of the births as regards sex and legitimacy is shown in the following table :—

Births.	Males.	Females.	Totals.
Legitimate	1,731	1,623	3,354
Illegitimate	74	79	153
Total	1,805	1,702	3,507

The proportion of male to female births was 1,061 to 1,000.

The percentage of illegitimate births was 4.4, as compared with 4.5 per cent. in 1920, and 5.0 per cent. in 1919. The average percentage for the five years 1910 to 1914 was 3.7.

The total number of births in each of the Wards of the town is given in the table on page 53.

Comparison of Birth-rate with rates for Country generally.

	Per 1,000 population.
England and Wales.....	22.4
96 Great Towns, including London	23.3
148 Smaller Towns	22.7
London	22.3
South Shields	29.6

(C) DEATHS.

Death-rate.

1,801 deaths occurred during the year, the death-rate being 15.2 per 1,000 of the population.

The rate for England and Wales was 12.1; for the 96 Great Towns, 12.3; for the 148 Smaller Towns, 11.3; and for London, 12.4.

The South Shields death-rates since 1871 are given in the table on page 25.

Causes of Death.

Among the chief causes of death were :—

Tuberculosis.—This disease caused more deaths in the Borough than any other. During 1921, the deaths from tuberculosis numbered 213, more than one-ninth of the total deaths.

Bronchitis (146) and Pneumonia (105) together caused about one-seventh of the total deaths. During the previous year they caused 481, or nearly one-fourth of the deaths in the Borough. The comparative mildness of the climatic conditions is reflected in a marked decrease in the mortality from pulmonary complaints (other than tuberculosis). On account of the exposed position of the Borough a considerable amount of morbidity from these conditions is to be expected. The death-rate from bronchitis and pneumonia was 2.12 per 1,000 of the population, the lowest rate from these diseases ever recorded in the Borough.

The deaths from cancer numbered 127 as compared with 105 in 1920. 177 deaths were due to heart diseases. Infantile debility and prematurity caused 125 deaths; while diarrhoeal diseases caused 88; injuries, accidents and violence 60; influenza 58, and nephritis 41.

Age at Death.

Of the total deaths, 335 (*i.e.*, 19 per cent.) were of infants under one year old; 200 (11 per cent.) were of children between the ages of 1 and 5 years; 89 (5 per cent.) were aged 5 to 15 years; 95 (5 per cent.) were from 15 to 25 years old; 102 (6 per cent.) were aged 25 to 35 years; 152 (8 per cent.) aged 35 to 45 years; 260 (15 per cent.) aged 45 to 60 years; and 568 (32 per cent.) were over 60 years of age.

Approximately one-third of the deaths were those of children under 5 years, and one-third over 60 years of age. Thus nearly two-thirds of all the deaths occurred at the extremes of life.

The infant mortality rate (*i.e.*, the deaths of children under one year old) is referred to in the Maternity and Child Welfare Section of the report (page 46). The rate for 1921 was 96 per 1,000 births.

Sex-Distribution of Deaths.

Of the total deaths 975 were males and 826 females, a proportion of 1,180 to 1,000.

Seasonal Death-rate.

The following gives the deaths and death-rates for each quarter of the years 1920 and 1921:

	No. of Deaths.		Death-rate.	
	1920.	1921.	1920.	1921.
First quarter	*614	†533	21.2	18.0
Second quarter	472	414	16.3	14.0
Third quarter	422	416	14.6	14.1
Fourth quarter	492	438	17.0	14.8

* 233 of these deaths were due to Influenza, Pneumonia, and Bronchitis.

† 156 „ „ „ „ „ „ „ „ „

Transferable Deaths.

272 deaths occurred *outside* the Borough (208 being in the South Shields Union Poor Law Institution) among persons whose

fixed or usual residence was in the town. These 272 are included in the total number of deaths (1801) stated above, on which the death-rate of the town is based.

On the other hand, 12 deaths occurred *within* the Borough among persons belonging to other districts. These have been transferred to the districts concerned, and are not included in the total deaths for South Shields.

The Harton Institution was included in the Borough by the extension of 1st November last, but for the purpose of the Report this year it has been regarded as outside the Borough.

Deaths in Public Institutions.

The number of deaths of South Shields residents which occurred in public institutions during the year is as follows :—

In the South Shields Union Poor Law Institution.....	208
In other institutions outside the Borough	42
In the Ingham Infirmary, South Shields.....	69
In the Borough Isolation Hospital, South Shields	7

This makes a total of 326, which is 18 per cent. of all the deaths during the year. In the years 1918, 1919, and 1920 the percentage was 14, 17, and 17 respectively.

During 1921 the percentage of deaths in institutions was, for the 96 Great Towns, 33 per cent. ; for London it was as high as 49 per cent. This gives some indication of the position as regards the extent of institutional relief of sickness in the Borough.

Coroners' Inquests.

Coroners' inquests were held regarding 76 deaths—that is, in 4 per cent. of the total deaths during the year.

58 of these deaths were due to various forms of violence, accidents, etc. (See table 1, pages 20 and 21).

Uncertified Deaths.

68 deaths (4 per cent. of the total deaths) were not certified by medical practitioners or by the Coroner. Of this number 19 were infants under one year old ; and 3 were children aged one to five years.

The following statement shows the high percentage of such deaths in South Shields as compared with the country generally :—

England and Wales.....	1.1 per cent.
96 Great Towns	0.7 „
148 Smaller Towns	1.4 „
London	0.2 „

Deaths from Principal Epidemic Diseases.

The seven "principal epidemic diseases" caused 161 deaths, as follows:—

Diarrhoea and enteritis (under two years)	73
Measles	44
Whooping cough	27
Diphtheria	12
Scarlet fever.....	3
"Fever" (enteric, typhus, and simple continued fever) ..	2
Smallpox	0

This corresponds to a death-rate from all these diseases of 1.37 per 1,000 of the population.

Comparison of South Shields Death-Rates with those of the Country generally.

The following table shows the annual death-rates in England and Wales for 1921:—

	Death-rate per 1,000 Population							Deaths per 1,000 Births.	Infant Mortality Rate.
	All causes.	Enteric fever.	Smallpox.	Measles.	Scarlet fever.	Whooping cough.	Diphtheria.	Diarrhoea & enteritis, (under 2 years)	
England and Wales ..	12.1	.02	.00	.06	.03	.12	.12	15.5	83
96 Great Towns, including London	12.3	.01	.00	.08	.04	.13	.15	19.3	87
148 Smaller Towns ..	11.3	.01	.00	.05	.03	.11	.11	15.6	84
London	12.4	.01	..	.05	.06	.12	.25	21.3	80
South Shields	15.2	.02	..	.37	.03	.23	.10	20.8	96

TABLE 1.—CAUSES OF DEATH, during 1921, of Persons belonging to the County Borough of South Shields, classified in accordance with the Registrar-General's Manual of the International List, as adapted for use in England and Wales.

(This list has been abridged by omitting headings against which no deaths have been recorded during the year)

CAUSES OF DEATH		M.	F.	All Ages.	AGES AT DEATH.												Total under 5 years.	85 and upwards.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
					0-3 Months.	3-6 Months.	6-12 Months.	Total under 1 year.	1-	2-	3-	4-	5-	10-	15-	20-		25-	35-	45-	55-	65-	75-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
I.—GENERAL DISEASES.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
1.	Enteric fever	1	1	2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															

TABLE 1.—CONTINUED.

CAUSES OF DEATH.	M.	F.	All Ages.	AGES AT DEATH.												85 and upwards.	55 to 60						
				Months.		Total under 1 year.	1.	2.	3.	4.	Total under 5 years.	5.	10.	15.	20.			25.	35.	45.	55.	65.	75.
				0-3	3-6																		
104 & 105. B. Diarrhea—Not returned as infective.....	10	11	21	3	6	6	15	1	2	..	..	18	2	..	..	1	..	..	..	..	..	..	..
C. Enteritis—Not returned as infective.....	7	6	13	2	2	3	7	2	..	..	..	9	..	..	..	..	1	1	..	2	..	..	..
D. Gastro-enteritis — Not returned as infective.....	20	19	39	10	7	10	27	11	..	..	..	38	..	..	..	..	..	..	1	..	..	..	..
H. Duodenal ulcer.....	2	..	2	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..
108. Appendicitis.....	5	7	12	..	..	..	..	..	..	..	..	..	..	3	2	2	..	2	3	..	..	..	1
109. A. Hernia.....	1	3	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	..
B. Intestinal obstruction.....	5	1	6	..	1	1	1	1	..	..	..	2	..	1	..	1	..	1	1	..	..	..	..
113. A. Cirrhosis of the liver (not returned as alcoholic).....	5	1	6	..	..	..	..	..	..	..	..	..	..	..	..	2	1	1	2	..	..	..	1
Biliary calculi.....	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..
114. Other diseases of the liver.....	1	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..
117. Peritonitis (cause unstated).....	1	1	2	..	..	..	..	..	..	..	..	..	..	..	1	..	1	1	..	..	..	..	..
118. B. Other diseases of the digestive system.....	..	2	2	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..
VI.—NON-VENEREAL DISEASE OF THE GENITO-URINARY SYSTEM AND ANNEXA.																							
119. Acute nephritis.....	7	3	10	..	..	..	..	1	..	1	..	2	3	..	1	1	1	2	..	..	..	..	1
120. A. Bright's disease.....	14	6	20	..	..	..	..	..	..	..	..	..	..	1	..	3	4	8	3	1	..	..	3
B. Nephritis (unqualified). 10 years and over, and Uremia.....	8	3	11	..	..	..	..	..	..	..	..	..	..	..	1	1	2	5	2	..	..	..	2

TABLE 1.—CONTINUED.

CAUSES OF DEATH	M.	F.	All Ages.	AGES AT DEATH.												85 and upwards	55 to 60			
				0-3 Months.	3-6 Months.	6-12 Months.	Total under 1 year.	1-2	3-4	5 years.	5-10	10-15	15-20	20-25	25-35			35-45	45-55	55-65	65-75
X.—MALFORMATION.																				
150.																				
A. Congenital hydrocephalus	1	2	3	..	1	2	3	..	..	3	..	..	..	..	..	..	..	..	..	..
C. Congenital malformation of heart	1	2	3	1	1	..	2	..	..	2	..	..	1	..	..	..	..	..	..	..
D. Other congenital malformations	2	3	5	5	..	..	5	..	..	7	..	..	..	..	..	..	..	..	..	..
XI.—DISEASES OF EARLY INFANCY.																				
151.																				
A. Premature birth	38	39	77	77	..	..	77	..	..	77	..	..	..	..	..	..	..	..	..	..
B. Infantile atrophy, debility, and marasmus	23	13	36	35	1	..	36	..	..	36	..	..	..	..	..	..	..	..	..	..
C. Icterus neonatorum	1	..	1	1	..	..	1	..	1	1	..	..	..	..	..	..	..	..	..	..
E. Want of breast milk	1	..	1	1	..	..	1	..	1	1	..	..	..	..	..	..	..	..	..	..
152.																				
B. Atelectasis	4	2	6	6	..	..	6	..	..	6	..	..	..	..	..	..	..	..	..	..
C. Injuries at birth	3	..	3	3	..	..	3	..	..	3	..	..	..	..	..	..	..	..	..	..
153.																				
Lack of care	1	..	1	1	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..
XII.—OLD AGE.																				
154.																				
A. Senile dementia	3	5	8	..	..	..	..	..	..	..	..	..	..	..	..	..	3	3	2	1
B. Senile decay	36	55	91	..	..	..	..	..	..	..	..	..	..	..	..	..	..	20	53	18
XIII.—AFFECTIONS PRODUCED BY EXTERNAL CAUSES.																				
155.																				
Suicide by poison . . . . .	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..

TABLE 2.—DEATHS DURING 1921 : SEASONAL AND WARD DISTRIBUTION.

CAUSES OF DEATH.	Total.	YEAR, 1921.				WARDS.														
		First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	Shields.	Beacon.	St. Hilda.	Hadrian.	Holborn.	Laygate.	Victoria.	Bents.	Rekenyke.	Westoe.	Deans.	Tyne Dock.	Simonside.	West Park.	Unknown.
All Causes { Certified Uncertified	1733 68	519 14	391 23	401 15	422 16	166 8	97 6	106 6	117 2	121 10	110 3	134 5	104 3	134 8	91 2	147 5	161 3	128 5	113 2	1
Enteric fever	2	..	2	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..
Smallpox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	44	..	26	18	..	3	1	4	5	5	8	5	2	..	1	4	2	..	..	..
Scarlet fever	3	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping cough	27	12	6	7	2	3	4	1	..	1	4	1	..	1	..	1	..	..	..	..
Diphtheria and croup	12	7	4	4	1	2	1	1	1	3	2	2	2	6	4	4	12	9	8	..
Influenza	58	36	11	3	8	2	2	1	1	..	..	..	..	..	..	..	..	..	..	..
Erysipelas	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Phthisis (pulmonary tuberculosis)	171	43	50	41	37	18	3	12	10	24	9	15	8	16	3	16	18	9	10	..
Tuberculous meningitis	13	3	1	5	4	..	..	2	2	3	1	2	4	1	1	2	1	2	1	..
Other tuberculous diseases	29	12	8	4	5	2	..	2	2	3	1	2	4	2	1	2	4	1	1	..
Cancer, malignant disease	127	33	29	36	29	12	11	11	6	9	4	8	7	9	7	10	9	11	13	..
Rheumatic fever	13	2	5	3	3	2	1	..	1	..	..	..	2	1	1	2	2	..	..	..
Menigitis	10	..	2	2	..	2	..	..	..	..	..	..	..	..	..	2	1	..	..	..
Organic heart disease	166	45	36	33	46	16	9	12	8	8	11	12	15	15	10	15	13	12	10	..
Bronchitis	146	71	35	16	24	15	14	10	11	8	16	8	8	10	10	8	15	6	7	..
Pneumonia (all forms)	105	49	24	6	26	15	8	8	12	8	7	7	2	10	4	7	7	6	4	..
Other diseases of respiratory organs	19	6	6	5	4	4	1	1	1	2	1	4	1	..	..	2	2	..	..	..
Diarrhoea and enteritis	88	11	10	44	23	9	6	6	3	8	6	12	3	7	1	8	10	6	3	..
Appendicitis and typhlitis	12	1	2	4	7	..	..	1	1	..	..	2	2	..	3	..	1	..	..	..
Cirrhosis of liver	6	2	..	..	2	1	..	..	1	..	..	..	2	..	..	..	..	..	..	..
Alcoholism	2	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nephritis and Bright's disease	41	18	8	5	10	4	4	..	2	1	4	1	3	4	4	6	3	2	3	..
Puerperal fever	2	..	1	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Other accidents and diseases of pregnancy and parturition	10	2	3	3	3	..	..	..	..	2	..	2	..	1	..	1	..	3	1	..
Congenital debility and malformation, including premature birth	126	22	27	37	40	11	4	8	10	13	4	12	4	11	5	19	11	10	4	..
Violent deaths, excluding suicide	51	15	5	17	12	5	1	2	5	2	5	1	5	3	2	6	5	5	4	..
Suicide	9	..	2	1	1	2	1	..	..	..	..	..	1	1	..	..	..	..	..	..
Other defined diseases	490	145	100	112	143	44	27	30	38	31	26	38	31	33	33	36	45	41	37	..
Diseases ill-defined or unknown	18	5	5	5	5	2	..	2	..	5	..	1	2	1	..	1	1	3	2	..
Total	1801	535	414	416	438	174	103	112	119	131	113	139	107	142	93	152	164	133	115	1

TABLE 3.—DEATHS DURING 1921 IN INSTITUTIONS, UNCERTIFIED DEATHS, etc.

CAUSES OF DEATH.	Deaths in Institutions in the Borough.		Deaths of S.S. residents in Institutions outside the Borough.		Deaths Certified by Coroner.		Uncertified Deaths.		Transferable Deaths.	
	Residents	Non-Residents	In S.S. Union Poor Law Institution.	Other Institutions.	Residents	Non-Residents.	Residents	Non-Residents.	Inward.	Outward.
Enteric fever	1	...	...	...	...	...	...	...	...	...
Smallpox	1	...	...	...	...	...	1	...	...	1
Measles	2	...	...	...	...	...	...	...	...	...
Scarlet fever .. .. .	...	...	...	...	...	...	...	...	...	...
Whooping cough	1	...	...	...	...	...	...	...	...	...
Diphtheria and croup .. .. .	...	...	...	...	...	...	...	...	...	...
Influenza .. .. .	...	...	...	...	...	...	...	...	...	...
Erysipelas .. .. .	...	1	36	8	1	...	3	1	44	2
Phthisis (pulmonary tuberculosis) .. .. .	...	...	...	...	...	...	...	...	1	7
Tuberculous meningitis	2	...	5	2	...	...	...	...	29	...
Other tuberculous diseases	7	...	18	6	1	...	...	...	1	...
Cancer, malignant disease	1	...	1	...	...	...	...	...	1	...
Rheumatic fever	1	...	...	...	...	...	...	...	1	...
Menigitis .. .. .	...	...	39	...	2	...	10	...	39	...
Organic heart disease .. .. .	...	...	13	1	...	...	3	...	14	...
Bronchitis	1	...	7	3	1	...	...	...	11	1
Pneumonia (all forms)	1	...	1	1	2	...	1	...	2	2
Other diseases of respiratory organs	1	...	5	...	1	...	2	...	5	...
Diarrhoea and enteritis	8	2	...	1	...	...	...	...	2	...
Appendicitis and typhlitis .. .. .	...	...	...	...	...	...	...	...	1	...
Girrhosis of liver .. .. .	...	...	1	...	...	...	1	...	6	...
Alcoholism .. .. .	...	...	6	...	...	...	...	...	...	...
Nephritis and Bright's disease	1	...	...	...	...	...	...	...	2	...
Puerperal fever .. .. .	...	...	...	...	...	...	...	...	...	...
Other accidents and diseases of pregnancy and parturition	1	...	2	...	...	...	...	...	...	...
Congenital debility and malformation including premature birth	4	...	3	...	...	...	6	...	3	3
Violent deaths, excluding suicide	20	3	...	3	49	3	1	...	9	1
Suicide	1	...	1	...	9	...	...	...	2	...
Other defined diseases	21	1	70	15	9	...	27	...	91	1
Diseases ill-defined or unknown .. .. .	...	...	...	...	1	...	13	...	2	...
Total	76	7	208	42	76	4	68	1	272	12

Note re Transferable Deaths and Deaths in Institutions :—The Harton Institution was included in the Borough by the extension of 1st November last. For the purpose of the Report this year it has been regarded as outside the Borough.

TABLE 4.—POPULATION, BIRTHS, AND DEATHS FOR 1921 AND PREVIOUS YEARS.

(FORMERLY L.C.B. TABLE 1.)

Year.	Popula- tion estimated to middle of each year.	Births.			Total Deaths registered in the Borough.		Transfer- able Deaths		Net Deaths belonging to the Borough.			
		Uncor- rected Num- ber.	Net.		Num- ber.	Rate.	Of Non-Residents registered in the Borough.	Of Residents not registered in the Borough.	Under 1 Year of Age		At All Ages.	
			Num- ber.	Rate					Num- ber.	Rate per 1,000 Net Births.	Num- ber.	Rate.
1	2	3	4	5	6	7	8	9	10	11	12	13
1911	108,844	3,279	3,300	30.3	1,687	15.5	13	216	484	147	1,890	17.4
1912	109,678	3,322	3,352	30.6	1,550	14.1	18	220	356	106	1,752	16.0
1913	110,513	3,478	3,495	31.1	1,803	16.1	21	229	408	117	2,011	17.9
1914	110,604	3,503	3,517	31.8	1,753	15.9	15	217	482	137	1,955	17.7
1915	109,855	3,265	3,275	29.6	1,871	17.0	28	287	468	143	2,130	19.4
1916	109,332	3,091	3,093	26.0	1,649	14.9	44	257	369	119	1,862	17.0
1917	106,500	2,699	2,714	22.8	1,750	16.4	33	271	362	33	1,988	18.6
1918	105,659	2,979	3,005	25.4	2,122	20.1	41	313	359	118	2,394	22.6
1919	111,502	3,104	3,130	26.9	1,677	15.1	37	242	370	113	1,892	17.0
1920	115,945	3,922	3,966	34.2	1,738	15.0	26	288	479	121	2,000	17.2
1921	118,400	3,464	3,507	29.6	1,541	13.0	12	272	335	96	1,801	15.2

NOTES.—(A) The rates in Columns 5, 7, and 13 are calculated per 1,000 of the population.

(B) The populations for the years 1915 onwards are the Registrar General's estimates for the *civilian* population.

For each of the years 1916, 1917, 1918, and 1919, the Registrar-General supplied two estimates of population:—

(1) for calculating birth-rates,

(2) „ „ death-rates.

The birth-rate population for each of those years was respectively 118,955; 118,717; 118,387; and 116,152. The *death-rate* (or *civilian*) population is shown in the table above.

(C) “Transferable Deaths” are deaths of persons who, having a fixed or usual residence in England or Wales, die in a district other than that in which they resided.

TABLE 5.—BIRTH-RATES, INFANT MORTALITY RATES, AND DEATH-RATES FROM VARIOUS CAUSES, 1871-1921.

YEAR.	Estimated Population.	Birth-rate.	Death-rate.	PRINCIPAL EPIDEMIC DISEASES.							Phthisis.	(Other Tuberculous Diseases.	Cancer.	Bronchitis.	Pneumonia.	Influenza.	Deaths under 1,000 births per year
				Total.	Smallpox.	Measles.	Scarlet Fever.	† Diphtheria.	Whooping Cough.	" Fever."	X Diarrhoea.						
Mean 1871-1880	50,580	43.1	25.5	6.0	.86	.42	1.44	.12	.78	.79	1.59	1.91	—	—	—	—	164
Mean 1881-1890	66,520	38.8	20.5	2.3	.01	.34	.45	.10	.44	.19	.78	1.84	—	—	—	—	140
Mean 1891-1900	87,022	36.1	20.1	2.45	.00	.44	.22	.11	.46	.28	.93	1.60	1.00	2.00	1.47	.29	166
1901	97,800	36.8	20.6	3.36	..	.68	.60	.14	.10	.22	1.60	1.63	.71	1.35	1.19	.18	169
1902*	101,801	36.9	19.8	2.66	.04	.93	.38	.06	1.02	.06	.17	1.81	.66	1.36	1.54	.12	149
1903	102,561	35.4	17.6	1.04	.01	.15	.12	.16	.03	.10	.49	1.72	.73	1.70	1.37	.17	132
1904	103,327	35.9	18.9	1.84	.07	.27	.08	.12	.62	.09	.60	1.59	.85	1.66	1.42	.26	144
1905	104,099	33.6	17.1	2.07	.04	.23	.06	.23	.61	.22	.68	1.21	.62	1.56	1.31	.19	145
1906	104,876	33.7	19.0	2.94	..	1.04	.06	.29	.37	.09	1.10	1.58	.72	1.39	1.35	.24	150
1907	105,659	31.0	18.0	1.53	..	.46	.09	.18	.51	.04	.26	1.69	.75	1.43	1.33	.33	133
1908	106,448	32.7	16.8	1.98	..	.30	.08	.22	.46	.08	.85	1.29	.67	1.24	1.04	.37	133
1909	107,244	31.6	16.6	1.50	..	.35	.18	.19	.34	.04	.41	1.21	.63	1.27	1.13	.29	138
1910	108,045	31.5	15.2	1.50	.02	.16	.06	.06	.59	.06	.56	1.25	.70	1.10	1.17	.29	111
Mean 1901-1910	104,186	33.9	17.9	2.03	.02	.45	.17	.16	.47	.10	.66	1.50	.71	1.41	1.28	.25	140
1911	108,844	30.3	17.4	2.07	..	.37	.01	.08	.21	.04	1.36	1.19	.58	1.33	1.56	.26	147
1912	109,678	30.6	16.0	1.39	..	.58	.05	.05	.46	.05	.18	1.53	.39	1.50	1.25	.22	106
1913	110,513	31.1	17.9	1.59	..	.51	.28	.07	.10	.06	.57	1.33	.66	1.48	1.28	.36	117
1914	110,604	31.8	17.7	2.23	..	.27	.22	.14	.52	.14	.95	1.31	.58	1.49	1.67	.21	137
1915†	109,855	29.6	19.4	1.84	..	.46	.17	.07	.41	.02	.70	1.67	.67	2.21	2.07	.18	143
1916	109,332	26.0	17.0	0.83	.01	.07	.08	.11	.19	.01	.36	1.73	.68	1.01	1.50	.09	119
1917	106,500	22.8	18.6	1.74	..	1.14	.01	.07	.12	.01	.38	1.96	.71	1.83	1.81	.07	133
1918	105,659	25.4	22.6	1.11	..	..	.02	.11	.47	..	.51	1.93	.61	1.85	2.01	4.36	118
1919	111,502	26.9	17.0	1.04	..	.37	.04	.09	.01	.01	.53	1.30	.63	1.53	1.56	1.84	118
1920	115,945	34.2	17.2	0.90	.01	..	.01	.11	.15	.04	.58	1.35	.41	2.16	1.98	.83	121
Mean 1911-1920	109,843	28.9	18.1	1.47	.00	.38	.09	.09	.26	.04	.61	1.53	.59	1.72	1.67	.84	126
Mean 1871-1920	83,630	36.1	20.4	2.78	.10	.41	.47	.12	.48	.28	.91	1.68	—	—	—	—	147
1921	118,400	29.6	15.2	1.37	..	.37	.03	.10	.23	.02	.62	1.44	.36	1.07	1.23	0.89	96

* The Borough was extended, November, 1901.

† Since 1891, Membranous Croup has been included under Diphtheria.

X Diarrhoea and Enteritis (under 2 years of age) since 1905.

† See note (B) to Table 4, as regards population since 1915.

NOTIFIABLE DISEASES.

Notifiable Diseases.

The diseases which are compulsorily notifiable were detailed in my Annual Report for 1920. There were no additions to or removals from that list during the past year.

Prevalence.

The following table shows the number of cases of infectious disease notified during each of the past ten years :—

Disease.	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921
Smallpox	1	1	..	1	5	2	..	1	..	..
Chickenpox .....	..	..	..	..	210	..	..	..	..	..
Scarlet Fever	273	1108	1023	925	363	128	76	146	146	601
Diphtheria and membranous croup	62	61	72	35	41	36	26	40	34	49
Measles .....	..	..	..	..	429	3936	57	2396	..	..
German measles .....	..	..	..	..	32	199	11	14	..	..
Enteric fever	18	22	65	9	7	5	12	7	10	5
Continued fever .....	..	..	..	1	..	..	..	..	..	..
Dysentery .....	..	..	..	..	..	..	..	8	5	2
Malaria .....	..	..	..	..	..	..	..	36	14	5
Cerebro-spinal fever	1	..	..	1	3	2	2	..	..	..
Polio-myelitis	3	3	1	2	1	1	..	..	..	2
Encephalitis lethargica ..	..	..	..	..	..	..	..	6	4	7
Pneumonia : primary ....	..	..	..	..	..	..	..	64	264	185
Pneumonia : influenzal ..	..	..	..	..	..	..	..	78	60	40
Puerperal fever	3	5	4	4	5	..	..	2	4	3
Erysipelas	65	80	70	57	55	35	27	41	28	36
Ophthalmia neonatorum ..	..	..	19	36	52	23	26	36	50	26
Pulmonary tuberculosis ..	478	319	354	437	294	331	227	268	270	283
Other tuberculosis .....	..	188	133	235	203	173	119	94	90	111
TOTAL	904	1787	1741	1743	1700	4871	583	3237	979	1355

The table on page 38 gives the age-incidence of the cases notified in 1921, the number occurring in each Ward of the town, together with the number removed to hospital, and the deaths from each disease.

No cases of smallpox, continued fever, relapsing fever, cholera, plague, cerebro-spinal fever, trench fever, typhus fever, or polio-encephalitis were notified during the year.

Seasonal Incidence.

The following table shows the number of cases notified in each month of the year :—

1921.	Scarlet fever.	Diphtheria.	Enteric fever.	Dysentery.	Malaria.	Encephalitis lethargica.	Polio-myelitis.	Primary Pneumonia.	Influenzal Pneumonia.	Puerperal fever.	Erysipelas.	Ophthalmia neonatorum.	Totals.
January	24	3	..	..	1	2	..	42	7	..	5	..	84
February	23	12	1	..	..	..	..	25	12	..	1	1	75
March ..	38	4	..	..	1	1	..	16	9	..	2	..	71
April	36	1	..	..	..	..	1	14	2	1	3	3	61
May	48	2	1	..	..	1	..	12	1	..	4	3	72
June	26	3	1	1	1	..	..	15	2	..	1	2	52
July	32	2	1	..	..	..	1	6	..	..	3	2	47
August ..	28	5	..	..	..	..	..	2	..	..	2	8	45
September	72	6	..	..	..	1	..	9	1	..	4	3	96
October	111	2	..	..	..	1	..	9	1	2	4	..	130
November	102	5	..	..	..	1	..	13	4	..	4	2	131
December	61	4	1	1	2	..	..	22	1	..	3	2	97
Total ..	601	49	5	2	5	7	2	185	40	3	36	26	961

Diseases in detail.

TUBERCULOSIS.—There were 394 cases notified during the year ; 283 pulmonary, and 111 non-pulmonary. There were, at the end of the year, 1,599 cases of tuberculosis in the Borough. The number of deaths from tuberculosis was 213, and of these 40 (29 pulmonary and 11 non-pulmonary) had not been notified prior to death. This figure is an improvement on that for 1920, when 57 cases had not been notified. When it is discovered that a case of tuberculosis has died for whom no previous notification has been received a letter is sent to the doctor who certifies the death, reminding him of his obligations under the regulations.

SMALLPOX.—No cases occurred in the Borough during the year. Five residents were reported as having been in contact with cases of smallpox or as having come from places abroad where smallpox was prevalent. They were kept under observation for periods of 21 days.

No vaccinations were carried out under the Public Health (Smallpox Prevention) Regulations, 1917.

SCARLET FEVER.—The number of cases notified during the year was 601 as compared with 146 for 1920. The disease was more prevalent than in any year since 1915. The cases appeared to be of a mild type. There were 4 deaths (including one non-resident transferable death). 73 per cent. of the cases were removed to hospital. There were 3 "return" cases.

PNEUMONIA.—There were 185 cases of primary pneumonia notified during 1921 compared with 264 in 1920. In addition there were 40 cases of influenzal pneumonia as compared with 60 in 1920. There was a marked improvement in fulfilling the requirements as to notification of such cases during the year.

ENTERIC FEVER.—A further reduction occurred in the number of cases of this disease. Five cases were notified in 1921 as compared with 10 in 1920. Of the 5 cases, two occurred in seamen who had contracted the disease elsewhere; one was a woman of 67 years and two were children aged 3 and 7 years respectively. As regards sanitary conveniences, 4 of the houses had privy receptacles and 1 had a w.c.

There were 2 deaths; a child aged 3 years, and a woman aged 67.

The incidence of enteric fever has decreased over the country generally, but it is somewhat remarkable that there should be so few cases of the disease in South Shields, in spite of the fact that there is always a risk of its introduction from abroad, and that the privy system is said to favour its spread.

DIPHTHERIA.—These were 49 cases of diphtheria notified as compared with 34 during 1920. There were 12 deaths, the case mortality being 25 per cent. The mortality from diphtheria is too high, but in the absence of adequate hospital accommodation this is to be expected since the successful treatment of the disease demands a high degree of nursing skill, and this cannot be obtained in many of the homes. It is anticipated that it will now be possible to accommodate cases of diphtheria in the isolation hospital. The death rate from diphtheria was .10 per 1,000 of the population. 176,000 units of antitoxin were supplied free from my Department.

ENCEPHALITIS LETHARGICA.—Seven cases were notified during the year—4 deaths occurred from this disease. No relationship or intercommunication between the cases could be established. The cases occurred in different wards of the Borough. Two were treated in the isolation hospital.

OPHTHALMIA NEONATORUM.—I have considerable satisfaction in recording a marked decrease in the number of cases of ophthalmia neonatorum. This is one of the most easily preventable of all

diseases, but if not prevented, or if treatment is delayed, there is a possibility that the child's vision may be seriously impaired. There were 26 cases notified during the year as compared with 50 in 1920. In the following table the cases are analysed with regard to the amount of damage to vision.

Cases.			Vision unimpaired.	Vision impaired.	Total Blindness.	Deaths.
Notified.	Treated.					
	At home.	In hospital.				
26	25	1	26	..	..	..

OTHER NOTIFIABLE DISEASES.—Three cases of puerperal fever were notified during the year, 2 of which died.

There were two cases of poliomyelitis notified; both died.

Two cases of dysentery and 5 of malaria were notified, none of which were indigenous cases. Two of the malaria cases were from one ship; they developed the disease soon after their arrival in the Borough.

36 cases of erysipelas were notified, and one death occurred from this disease.

Certain non-notifiable diseases.

WHOOPING COUGH AND MEASLES.—Information as to the occurrence of these diseases is obtained through the schools and from the Health Visitors. 200 cases of whooping cough and 500 cases of measles came under surveillance during the year. Being regarded by many people as trivial complaints, they are frequently neglected. The work of the Health Visitors in connection with these diseases materially assists in the prevention of much subsequent invalidity.

Measles caused 44 deaths, and whooping cough 27.

On account of the prevalence of measles, three classes of Baring Street Infants' School were closed from 6th to 18th May, and two classes at Barnes Infants' School from 14th to 26th June.

DIARRHOEA AND ENTERITIS.—The deaths from these diseases in children under 2 years of age numbered 73, the death rate being 0.62 per 1,000 of the population, and 21 per 1,000 births. In spite of the climatic conditions being favourable there did not appear to be an excessive number of cases.

ISOLATION HOSPITALS.

Accommodation.

Details as to the accommodation for infectious diseases were given in my Annual Report for 1920. As a consequence of the epidemic of scarlet fever during the last four months of 1921 the accommodation at the hospital was overcrowded, and the standard of air space recognised for infectious diseases hospitals was infringed to a very considerable extent. It was only possible to admit cases from sublet or otherwise overcrowded houses. 73 per cent. of the cases were removed to hospital. Many who would otherwise have been removed had to be refused admission.

It was thought that the experience of seven years ago would be repeated when additional beds had to be found in a marquee. The Council, towards the end of the year, purchased three army huts. These were erected in the grounds of the hospital, and provide accommodation for patients and nursing staff. They were practically ready for occupation at the end of the year.

Under existing economic circumstances it did not appear expedient to proceed with the erection of the proposed new hospital for infectious diseases and tuberculosis. The Council, therefore, decided to carry out certain repairs and necessary improvements to the existing hospital.

Cases Treated during 1921.

The following table shows the number of cases treated at the Deans Hospital during 1921 :—

Notified Diseases.	Remaining in on Dec. 31st, 1920.	Admitted during 1921.	Discharged.	Died.	Remaining in on Dec. 31st, 1921.
Scarlet fever	31	436	386	4	77
Enteric fever	1	3	3	1	..
Diphtheria	3	7	9	1	..
Encephalitis lethargica .....	..	2	2	..	..
Meningitis .....	..	1	..	1	..
Suspected scarlet fever .....	..	1	1	..	..
Totals	35	450	401	7	77

The average daily number of cases under treatment in hospital is shewn below :—

Notified Diseases.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Whole year.
Scarlet fever...	31	39	47	47	54	47	37	36	52	89	104	90	56
Enteric fever	0	1	1	0	0	0	0	1	..	..	..	..	0
Other.....	5	6	3	0	..	..	..	..	..	..	..	..	1
Totals	36	46	51	47	54	47	37	37	52	89	104	90	57

SCARLET FEVER CASES.—436 cases were admitted during the year. The greatest number under treatment at any one time was 117, on November 10th. The lowest number, was 24, on January 6th and 10th. The average stay in hospital was 47 days.

Three cases were found not to be scarlet fever, the ultimate diagnosis being measles (2 cases) and diphtheria (1 case).

Seven scarlet fever patients developed chickenpox after periods in hospital varying from one day to five weeks. One developed measles after being six weeks in hospital.

Four deaths occurred. One patient died within half an hour of admission from acute rheumatism and endocarditis. Another death was primarily due to tuberculous meningitis. The two other deaths occurred after 8 and 33 days treatment, the causes being scarlet fever with broncho-pneumonia and scarlet fever with endocarditis.

The cases, on the whole, were mild in type, but it was evident as the hospital became overcrowded that the disease tended to become more "septic." This was no doubt due to the decreased air space and consequent concentration of the infection.

ENTERIC FEVER CASES.—Three cases were admitted; one death occurred, after 8 days in hospital.

DIPHTHERIA.—Seven cases were admitted; one death occurred within 24 hours of admission.

OTHER DISEASES.—One case of meningitis and one of suspected scarlet fever were admitted. The case of meningitis ended fatally.

SMALLPOX.—No case from the Borough was admitted to the Whiteleas Smallpox Hospital during the year. Two patients and seven contacts were removed from the area of a neighbouring authority. The ultimate diagnosis was chickenpox in each case.

SUMMARY OF NURSING ARRANGEMENTS, HOSPITALS AND OTHER INSTITUTIONS AVAILABLE IN THE DISTRICT.

PROFESSIONAL NURSING IN THE HOME.—There are no arrangements for providing nursing assistance, voluntary or otherwise, in the Borough, except any such provision which may be made by the Poor Law Authority.

MIDWIVES.—No midwives are employed or subsidised by the Local Authority. There are 18 midwives practising in the Borough.

CLINICS.—The following clinics are provided by the Council :—
Tuberculosis Clinic—Town Hall.

Maternity and Child Welfare Centre—(Treatment and consultation)—Town Hall.

Maternity and Child Welfare Centre—(Treatment and consultation)—St. Hilda's, Coronation Street (Opened, November, 1921).

School Clinic—Town Hall.

School Clinic—(Dental and Surgical, and Cleansing Station)—Wesley Street.

Venereal Diseases Clinic—Deans Hospital.

There are no Day Nurseries.

HOSPITALS.—The only hospitals provided by the Local Authority are the Isolation Hospital, Dean Road, and the Tuberculosis Sanatorium, Cleadon Park.

The Council is one of the component authorities of the North East Durham Joint Smallpox Hospital Board, which maintains the Whiteleas Smallpox Hospital.

There are no maternity or children's hospitals in the Borough.

The Ingham Infirmary (Voluntary) contains 80 beds, mostly for surgical cases. The Council have an agreement with the Ingham Infirmary whereby cases of surgical tuberculosis are treated at the expense of the Council.

Other hospitals used by the inhabitants are :—

The Royal Victoria Hospital, Newcastle-on-Tyne.

The Fleming Memorial Hospital for Children, Newcastle-on-Tyne.

The Eye and Ear Hospital, Sunderland.

The Harton Institution (Poor Law) which serves a large area of N.E. Durham, including South Shields

County Borough, South Shields Rural District, Borough of Jarrow, and Urban District of Hebburn, is situated in the Borough.

INSTITUTIONAL PROVISION FOR UNMARRIED MOTHERS, ILLEGITIMATE INFANTS, AND HOMLESS CHILDREN.—No institutional provision is made by the Local Authority.

St. Verca's Home (Church of England), the Salvation Army Home, and the Edward Brough Home (Poor Children's Holiday Association) are maintained by the respective authorities mentioned.

AMBULANCE FACILITIES.—(a) The Council provide a motor ambulance at the Deans Hospital for cases of infectious disease.

(b) The police ambulance is maintained for accident and other non-infectious cases.

LABORATORY WORK.—The following table shows in detail the examinations of pathological material carried out in the Municipal Laboratory during the year. In addition, specimens were sent from the Venereal Diseases Clinic to the College of Medicine, Newcastle, for examination :—

<i>Nature of Examination.</i>	<i>No.</i>
Swabs for diphtheria bacilli	226
Sputum for tubercle bacilli	271
Blood for Widal re-action	6
Faeces for b.typhosus	2
Pus for gonococci and other organisms	23
Shaving brush for o. anthracis	1
Hair for ringworm	27
Urine for chemical and microscopical examination	29
Urine for bacteriological examination	2
Vaccines prepared	5
Preparation of tuberculin.	
Preparation of media.	

TUBERCULOSIS.

Incidence.

Number of South Shields residents on Tuberculosis	
Register on January 1st, 1921	1,860
Number notified during 1921	394
Number removed from Register during 1921	655
Total number of South Shields residents on Register on December 31st, 1921	1,599

The reasons for removal from the register were :—

Found on examination not to be suffering from tuberculosis	4
Cases who showed no active signs for two years....	290
Left the district	23
Two years untraced	14
Apparently well for two years	140
Died from tuberculosis	173
Died from causes other than tuberculosis	11

Notification.

Of the 394 cases notified during the year, 283 had pulmonary and 111 non-pulmonary tuberculosis. Of the total notifications, 25 were in respect of Arab seamen resident in the town. Of the 213 deaths from tuberculosis 40 had not been notified before death. Of the 173 notified cases who died—

23	died	before the notification was received.	
23	„	within one week of notification.	
20	„	„	to a month of notification.
26	„	„	one month to 3 months
21	„	„	3 months to 6 months
20	„	„	6 months to 12 months

It will be seen that there is still a good deal of slackness on the part of some general practitioners with regard to the notification of tuberculosis. If the measures to be adopted for the prevention of this disease are to be successful, prompt notification of cases as they occur is essential, since the measures depend to a large extent upon notification. It will be most regrettable if statutory action has to be resorted to before the responsibilities under the Tuberculosis Regulations are realised.

The following table shows the cases notified during the year classified according to sex and age groups. It should be recorded here as an explanation in part, of the excess of males over females, that 21 of the Arab seamen referred to above were pulmonary cases : 19 aged 20-35 years, 1 aged 35-45, and 1 aged 45-65 years.

	Years.												Total
	0—1	1—	2—	3—	4—	5—	10—	15—	20—	35—	45—	65—	
Pulmonary :													
Males . . . . .	..	2	1	2	2	19	16	10	57	38	15	3	165
Females . . . . .	..	3	..	3	2	20	11	14	40	18	7	..	118
Non-pulmonary:													
Males	3	2	2	..	6	20	7	7	4	3	2	..	56
Females	1	4	3	4	3	9	12	5	10	3	1	..	55

Mortality.

During the year there were 213 deaths from tuberculosis ; 171 pulmonary and 42 non-pulmonary, corresponding to a death rate of 1.80 per 1,000 of the population. 17 or 8 per cent. of the deaths occurred among Arab seamen.

Treatment of Tuberculosis.

RESIDENTIAL INSTITUTIONAL TREATMENT.—On 1st May, 1921, the duty of providing treatment for insured persons was transferred from the Health Insurance Committee to the Town Council. Prior to this date no institutions were under the control of the Corporation. On 1st May, the Council became responsible for the treatment of 7 men—5 of whom were ex-service men—and one woman, who were then in sanatoria. After that date 3 ex-service and 4 insured men were sent to various sanatoria at the cost of the Council. On July 28th the Mansion House at Cleadon Park was opened for the sanatorium treatment of tuberculosis and accommodation was provided for 20 men and 5 women ; later it was found possible to provide for 2 additional men and 2 women. Before the end of the year, 45 patients were admitted to Cleadon Park Sanatorium, of whom 16 were ex-service men.

During the year 34 cases of surgical tuberculosis were treated at the Ingham Infirmary at the cost of the Corporation.

The following table shows the distribution and classification of South Shields patients admitted to institutions during 1921, and includes those treated at the expense of the Corporation.

	Ex-service men.	Insured.		Non-Insured.				Total.
		Men.	Women.	Men.	Women.	Boys.	Girls.	
Approved Sanatoria, etc.—								
Cleadow Park.....	16	14	2	..	6	4	3	45
Stanhope	8	14	..	..	..	1	..	23
Ingham Infirmary.....	..	12	2	..	7	21	12	54
Royal Victoria Infirmary.....	..	..	..	..	2	..	2	4
Other Sanatoria, etc.	1	..	1	..	..	2	3	7
Poor Law Institutions .....	..	35*	5	1	10	5	4	60
Other Hospitals	1	..	..	..	..	1	..	2

* Includes 18 Arab seamen.

The number of individual patients referred to in the above statement was 185, of whom 121 were pulmonary and 64 non-pulmonary cases. (Ten of the patients received treatment in more than one institution during the year).

Municipal Clinic.

The details as to the scope of the work, etc., are substantially the same as in my former reports. The only change in the staff was occasioned by the resignation of Dr. Douglas Martin, and the appointment of Dr. A. H. Wear as Tuberculosis Officer. The following is a summary of Dr. Wear's report on the work of the clinic during the year.

330 new cases were examined at the clinic. Of these 169 were suffering from tuberculosis. 129 had tuberculosis of the lungs, and 40 tuberculosis of other organs. In 161 cases no evidence of the disease was found.

The following tables summarise the whole of the work of the clinic during 1921 :

Total number of attendances at the clinic	14,209
" " examinations	1,154
Number of new cases examined	330
" examinations of ex-service men	393
Number on clinic treatment register on 1-1-21	284
" taken on for treatment in 1921	174
" discharged	129
" remaining under treatment on 31-12-21	329
" of home visits paid by Health Visitors—	
First visits.....	400
Subsequent visits	4,137
" of premises disinfected after removal to hospital	38
" " " after death.....	141

EXAMINATION OF NEW CASES.

		Found to be tuberculous.		Not tuberculous.	Total.
		Pulm.	Non-pulm.		
Insured	Men	50	2	24	76
	Women ..	5	1	2	8
Non-insured	Men	3	3	1	7
	Women ..	25	9	38	72
	Boys	20	15	44	79
	Girls	26	10	52	88
Total		129	40	161	330

Thirty-eight of these cases were ex-service men referred to the Tuberculosis Officer by the Deputy Commissioner of Medical Services, South Shields Area.

TREATMENT AT CLINIC.

	Under treatment on 31-12-20.	New cases.	Cases taken off Register.	Cases remaining 31-12-21.
Insured—				
Pulmonary : —				
Men	66	33	34	65
Women	26	4	9	21
Non-pulmonary—				
Men	4	5	4	5
Women	1	1	1	1
Non-insured :				
Pulmonary—				
Men	2	..	1	1
Women	29	28	10	47
Boys	41	31	16	56
Girls	55	33	25	63
Non-pulmonary—				
Men .....	..	..	..	..
Women	4	8	2	10
Boys	29	17	11	35
Girls	27	14	16	25
Total	284	174	129	329

TABLE 6.—CASES OF, AND DEATHS FROM, NOTIFIABLE INFECTIOUS DISEASE IN SOUTH SHIELDS DURING THE YEAR 1921.

Notifiable Diseases.	No. of Cases notified.										No. of Cases notified in each Ward.										No. of Deaths. †																								
	At following Ages—Years.										At all ages.	No. of Cases admitted to Hospital.*										At following Ages—Years.																							
	At following Ages—Years.											At following Ages—Years.										At following Ages—Years.																							
	0.	1.	2.	3.	4.	5.	10.	15.	20.	35.		45.	65.	Shields.	Beacon.	St. Hilda.	Hadham.	Holborn.	Laygate.	Victoria.	Bents.	Rekentyke.	Westoe.	Deans.	Tyne Dock.	Simonside.	West Park.	No. of Cases admitted to Hospital.*	At all Ages.	0.	1.	2.	3.	4.	5.	10.	15.	20.	35.	45.	65.				
Diphtheria	49	4	1	6	4	25	—	—	—	—	1	2	2	2	1	5	1	2	3	2	2	12	2	3	2	10	8	12	3	1	2	1	4	—	—	—	—	—	—	—	—	—	—	—	
Erysipelas	30	1	—	—	—	—	2	1	2	8	8	12	2	4	1	3	—	1	6	3	3	7	4	1	3	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Scarlet fever	601	3	10	17	36	46	277	158	40	13	1	—	24	51	21	38	28	24	63	40	53	57	81	30	26	456	4	—	1	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	
Eutene fever	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Puerperal fever	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Encephalitis lethargica	7	—	1	1	—	—	—	—	—	—	—	—	—	—	—	1	1	1	1	1	1	1	1	1	1	1	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Polio-myelitis	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Dysentery	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Malaria	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Pneumonia : primary	185	16	25	13	3	24	6	10	28	25	23	72	16	11	16	2	1	1	1	1	1	1	1	1	1	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Do. influenza	40	1	—	1	—	2	1	—	15	10	6	4	1	5	2	—	—	—	3	1	2	4	9	7	4	7	25	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Do. influenza	26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Ophthalmia neonatorum	165	2	1	2	2	19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Putn. tuberculosis . . . M.	118	3	3	2	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Do. Do. . . F.	56	3	2	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Other tuberculosis . . . M.	55	1	4	3	4	3	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Do. Do. . . F.	55	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Total	1355	53	51	40	56	66	399	216	92	184	112	69	1789	107	50	104	126	65	130	66	119	105	46	85	64	113	634	371	27	33	9	15	6	21	20	22	87	62	49	17	—	—	—		

* Including, in the case of tuberculosis, admissions to sanatoria, infirmaries and other residential institutions.

† Including one admitted to Tynemouth Hospital.

‡ Including transferable deaths and cases not previously notified

VENEREAL DISEASES.

Dr. C. G. Timms was in clinical charge of the Municipal Venereal Diseases Clinic at the Deans Hospital until the middle of August. On relinquishing his appointment the work was carried on by one of the local medical practitioners until September 1st, when Dr. A. B. McAulay Lang took up duty. There were no other changes in the staff during the year.

The following report by Dr. Lang gives the details of the work carried out at the clinic in 1921.

During the past twelve months the Out-Patient Department at the Deans Hospital has progressed steadily towards greater efficiency and the benefits there available have been increasingly taken advantage of. The total number of new patients seen during the year was 834, and the total number of attendances made by patients was 18,157. Of this number 12,687 have been made by residents, and 5,470 by non-residents.

The irrigation room for male gonorrhoea cases, inaugurated last year, has been a very valuable aid in treatment, and a great incentive to the patients to continue their attendances at the centre. It is open morning and evening every week-day with the exception of Wednesday and Saturday evenings. The present accommodation provided has until now sufficed, but, with the steady increase in attendances, further facilities for irrigation will probably soon be required.

During the year arrangements have been made for the irrigation of female gonorrhoea cases, and the way in which the patients are taking advantage of these is highly satisfactory. The female irrigation room is open every week-day at such times that male and female patients do not come in contact. A marked feature of the female department is the large preponderance of "innocents" and the comparative absence of the amateur and professional class who are so largely responsible for the spread of these diseases.

Scope of the Work.

All patients at their first attendance are examined clinically, and their treatment prescribed. Pamphlets containing instructions as to general hygiene whilst undergoing treatment are given, and the necessity for regular attendance emphasized. Patients are requested to notify me if they intend leaving the district so that information concerning facilities for treatment in their new area may be given. Particulars regarding treatment centres all over

the world have been compiled and are now available, such information being especially valuable to the sea-faring patients.

The following table shows the number of new cases treated during the year 1921: under "total cases" is included, the number of old patients who continued their treatment from previous years.

(a) CASES TREATED IN THE SOUTH SHIELDS CLINIC DURING 1921.

	NEW CASES.				TOTAL CASES	
	Male.	Female.	Residents.	Non-residents.	Male.	Female.
Syphilis	192	37	147	82	399	79
Soft chancre....	19	..	7	12	26	..
Gonorrhoea	377	18	207	188	651	29
Non-venereal diseases	185	6	111	80	185	6
Total	773	61	472	362	1,261	114

In table (b) is tabulated the number of attendances of patients made at the Clinic during the year, attendances to see the Medical Officer being shown separately from other intermediate attendances. The total attendances numbered 18,157, as compared with 14,837 during 1920. The average number of attendances per patient is also noted under the separate diseases.

(b) TOTAL ATTENDANCES AT THE CLINIC.

	Male.		Female.		Total.		Average Attendance.	
	M.O.	Others	M.O.	Others	M.O.	Others	Male	Female
Syphilis	2,248	1,309	470	109	2,718	1,418	8.9	7.3
Soft chancre..	72	84	..	..	72	84	6.0	..
Gonorrhoea ..	2,294	9,988	175	678	2,469	10,666	18.9	29.4
Non-venereal diseases ..	320	394	11	5	331	399	3.9	2.7
Total	4,934	11,775	656	792	5,590	12,567	13.3	12.7

A noteworthy feature of the table is the large number of non-residents, including many foreign seamen. The attendances of non-residents are shewn as under :—

	Attendances.
From 13 Counties	1,368
„ 17 County Boroughs in England and Wales	1,372
„ Scotland	1,407
„ Ireland	29
„ 9 Colonies, etc.....	438
„ 16 foreign countries	856
Total	<u>5,470</u>

As will be seen, a large number of attendances was made by non-venereal patients. Most of these had exposed themselves to the risk of infection and came for advice, but a certain number were sufferers from chronic diseases who came fearing they might have a venereal origin.

Table (c) shows the number of patients who were discharged, transferred, or ceased to attend during the year, and those still under treatment on December 31st, 1921.

(c) CASES DISCHARGED, ETC.

	Syphilis.		Soft chancre.		Gonorrhoea.	
	M.	F.	M.	F.	M.	F.
Ceased attending—						
(a) before completing first course of treatment....	123	19	..	..	420	10
(b) after one or more courses, but before completion of treatment.....	124	20	..	..	..	..
(c) after completion of treatment; but before final tests as to cure.....	16	2	..	..	2	..
Transferred to other centres ..	10	2	1	..	17	2
Discharged after completion of treatment and observation	12	4	21	..	50	2
Under treatment 31-12-21 ..	114	32	4	..	162	15

This table illustrates a very unsatisfactory feature in the fight against venereal diseases, viz., the number of patients who cease attending before they have completed a course of treatment. This

proportion is being steadily reduced, and I am hopeful that it will be still further reduced as the patients realise the disabilities produced by neglect. The floating population is largely responsible for the magnitude of the figures. I advocate strongly that compulsory attendance should be enforced by legislative measures.

Criteria of Cure.

The requirements that are insisted on before a patient is discharged as cured are as follows. In the case of syphilis, the course of treatment prescribed is regulated by the stage of the disease on commencing treatment, and the results of the Wassermann reaction. Before "discharge as cured," negative Wassermann tests at intervals of three months over a period of two years after the cessation of all treatment, is insisted on. Prior to the later "Wassermanns," a provocative injection of salvarsan substitute is given. In the case of gonorrhoea patients, there must be no clinical evidence of disease after resumption of normal habits of life as regards food, exercise, alcohol, spices, etc. Microscopical examination of the exudates must be negative after a provocative irrigation, prostatic massage, passage of a bougie, and in selected cases, a provocative injection of vaccine.

In-Patient Treatment.

The total number of patients treated in the wards of the clinic during the year, and the number of in-patient days, are shown in table (d). All the in-patients were males.

(d) IN-PATIENT TREATMENT.

	No. of In-patients.		No. of In-patient days.	
	Resident.	Non-resident.	Resident.	Non-resident.
Syphilis	6	16	139	455
Soft chancre.....	1	2	63	41
Gonorrhoea	1	14	16	393
Non-venereal diseases..	1	..	2	..
Total	9	32	220	889

Salvarsan Substitutes Used.

During the year Novarsenobillon has been used exclusively at the Centre, and the number of doses given is shown in Table (e). The table also shows the number of doses supplied to five local medical practitioners who applied for them to the clinic.

Of the salvarsan substitutes used at the clinic, 1,572 doses were administered to out-patients, and 65 to in-patients; 1,111 doses to residents, and 526 to non-residents.

(e) SALVARSAN SUBSTITUTES USED.

Name of Drug.	Dose.	Number of doses.	
		At Clinic.	To local doctors.
Novarsenobillon	0.15 grm.	3	..
	0.3 "	166	23
	0.45 "	320	19
	0.6 "	1,001	55
	0.75 "	96	10
	0.9 "	51	10
Total .....	..	1,637	117

Co-operation of the Medical Profession.

The local medical practitioners continue to take full advantage of the facilities offered by the clinic for diagnosis and treatment, and the spirit of good-will existing is very satisfactory.

Pathological Examinations.

In accordance with arrangements entered into in 1916, the following examinations of pathological material from South Shields patients were made at the Durham University College of Medicine, Newcastle-on-Tyne, during the year 1921. These examinations are in addition to those carried out at the South Shields Clinic, but they include specimens sent from the clinic. It will be seen that 14 private medical practitioners (10 of whom were South Shields doctors) sent 82 specimens to the College of Medicine.

445 specimens were sent from the clinic. The number of microscopical examinations made at the local clinic was 34.

(f) PATHOLOGICAL EXAMINATIONS.

Source of Material.	Nature of Examination.		Total.
	Wassermann reactions.	Microscopical.	
South Shields V.D. Clinic	413	..	413
Newcastle V.D. Clinic	113	..	113
Sunderland V.D. Clinic	3	1	4
Harton Hospital, South Shields	4	..	4
Ingham Infirmary, South Shields	1	..	1
Eye Infirmary, Sunderland	2	..	2
Private practitioners (14)	79	3	82
Total	615	4	619

South Shields Cases Treated at other Centres.

In addition to the cases dealt with at the local municipal treatment centre, I learn from returns received that South Shields residents received treatment at the Royal Victoria Infirmary, Newcastle; the Royal Infirmary, Sunderland; the "Dreadnought" Hospital, Greenwich; and the Borough Hospital, Birkenhead. Details of the patients treated are as follows:—

	Newcastle.	Sunderland.	Birkenhead.	Greenwich.	Total.
(a) Number of persons dealt with during the year for the first time, and found to be suffering from:—					
Syphilis (males, 21; females, 14) ..	31	..	1	3	35
Soft chancre (males, 4) .....	..	..	1	3	4
Gonorrhoea (males, 18; females, 5)	13	..	2	8	23
Non-venereal disease (males, 2; females, 4)	6	..	..	..	6
(b) Total number of attendances at the out-patient clinics	635	25	2	82	744
(c) Aggregate number of "in-patient" days	7	..	..	16	23
(d) Number of doses of salvarsan substitutes given in the—					
1. Out-patient clinics	176	3	1	..	180
2. In-patient departments .....	..	..	..	..	..

Propaganda.

In March, a week's course of lectures, including a cinema exhibition of the films "The Shadow," and "How Life Begins," was given by a lecturer from the National Council for Combating Venereal Diseases. The total attendance was approximately 2,000.

Another week's campaign was held in October, when the film "Open your Eyes" was shown daily at a local picture house, and a lecturer from the National Council delivered an address at each meeting. The attendance was about 2,400.

Literature has been given out from the Clinic, and at the meetings referred to. A supply was also sent to the local secretary of the National Seamen's Insurance Society for distribution to seamen.

MATERNITY AND CHILD WELFARE.

Notification of Births.

The number of births reported to the Health Department during 1921 was 3,466, as under :—

(a) Notified under the Notification of Births Acts :—

by midwives	1,859
by doctors.....	512
by relatives and others	238
	<hr/> 2,609

(b) Reported by local Registrars :—

(not previously notified)	857
---------------------------------	-----

Total	<hr/> 3,466 <hr/>
-------------	-------------------

This total includes 34 live twin births and 1 live triplet birth, but is exclusive of 104 still-births (29 notified by doctors, 72 by midwives, and 3 by relatives).

There was again a slight improvement in the notification of births during the year, but the proportion notified to the total registered is still only about 75 per cent. It will be observed that midwives and doctors report nearly all the cases. Parents and others notify comparatively few.

The still-births notified amounted to 3.0 per cent. of the total registered live births, as against 3.1 per cent. for 1920.

Infant Mortality.

Number of deaths during 1921 among infants under 1 year 335

The principal causes of death were :—

Premature birth	77
Debility	38
Malformation, atelectasis and injury ..	19
Bronchitis	30
Pneumonia	19
Gastro-intestinal disorders.....	63
Convulsions	49
Syphilis	9
Whooping Cough.....	8
Measles	5

Infant mortality rate	96
Infant mortality rate in illegitimate infants	170

Of the infant deaths, it will be seen that nearly half were due to premature birth, debility, malformation, etc., and syphilis. The majority of deaths from these causes and probably a number ascribed to convulsions are due to ante-natal conditions. The development of the ante-natal side of the Council's maternity and child welfare scheme will no doubt tend to reduce the mortality from these causes.

63 deaths were due to gastro-intestinal disorders—many of them were probably associated with errors in diet—while 49 deaths were caused by respiratory diseases.

The causes of death and age-incidence are given in greater detail in the tables on pages 52 and 53.

Deaths of Mothers during Labour and Puerperium.

12 deaths occurred from the following causes :—

Puerperal fever	2
Puerperal haemorrhage	2
Abortion	1
Ectopic gestation.....	1
Puerperal nephritis	3
Puerperal convulsions.....	3

The maternal mortality is therefore 3.4 per 1,000 births.

Inspection of Midwives and Administration of the Midwives Acts.

At the end of 1920 there were 16 midwives practising in the Borough; all were practising independently of any association, hospital, or voluntary agency. During 1920 four trained midwives commenced work in the town, including one who acted as a locum tenens. One midwife removed from the district, and one midwife did not notify her intention to practise during the year. At the end of 1921 there were 18 practising midwives in the Borough, of whom three were untrained.

The total number of cases attended by midwives during the year was 1,684; about 50 per cent. of the total births as compared with over 60 per cent. during 1920.

The Inspector of Midwives paid 202 visits of inspection to midwives, of which 158 were routine visits and 44 special inspections. The number of interviews with midwives at the Health Department was 7.

I have again to record an improvement in the keeping of records by the midwives, and in their observance of the Rules of the Board. Several minor defaults were reported against midwives during the year but no *prima facie* case of negligence justifying a report to the Central Midwives Board.

Notifications from Midwives.

The following notifications from midwives were received during 1921 in accordance with the rules of the Central Midwives Board :—

Sending for medical help (356 causes) ..	354
Still births.....	53
Deaths of infants.....	4
Deaths of mothers ..	..
Artificial feeding.....	14
Infectious cases ..	6
Laying out dead body.....	..
Intention to practice ..	18

The reasons assigned by midwives for the calling in of medical help included practically all the emergencies as laid down in the Rules. In 252 cases the emergency was in some way connected with maternal conditions, the principal causes being :—

Instrumental assistance for prolonged or difficult labour, malpresentations, etc.	101
Still-births ..	47
Abortion, miscarriage and premature birth	14
Torn or ruptured perineum ..	15
Increased pulse and temperature ..	12
Retained or adherent placenta ..	12
“ Haemorrhage ” ..	8

In 104 cases help was required for some abnormality of the child. The chief conditions were :—

Injuries or deformities ..	8
Feebleness or weakness ..	27
Inflammation of or discharge from eyes	53

The doctor who was called in the emergency sent his account to the local supervising authority in 138 instances as against 46 in 1920. The total amount of fees claimed was £203 5s. 6d. The authority decided to recover from the patient or her husband, or the person responsible for her maintenance £93 11s. 0d. (59 cases). The amount actually recovered at the end of the year was £25 12s. 0d.

The widespread industrial depression was the chief reason for the small amount recovered. There is, at the same time, a distinct feeling among many patients that since they are not consulted as to the calling in of a doctor by the midwife, they ought not to be responsible for his fee. From the point of view of the midwife, she also is likely to be prejudicially affected by this Section of the Act of 1918. She must call in medical help in the contingencies specified in the Rules, and this may operate to limit her engagements and practice if the local supervising authority press unduly for the recovery of fees. In this way uncertified women may be encouraged. There is again a certain section of the community who will avail themselves to the fullest extent of any form of treatment provided by the municipality.

Municipal Infant Welfare Centre.

The details as to staff, scope of the work and other details not specifically alluded to in this report, are substantially the same as outlined in my Annual Report for 1920.

The work of the original centre is carried on at the Health Department, every afternoon. An additional Centre was opened at St. Hilda's Schools in November, and arrangements have been made for consultations to be held there once a week. It will be possible to hold a second consultation should circumstances demand it. The new centre will, it is hoped, be the means of bringing a large number of mothers and children in a densely populated area under supervision, and will to some extent relieve the pressure on the larger centre. The following is a report made to me by Dr. Dorothy Blair on the work of the clinics for the year.

Summary of visits paid to Centres by mothers and infants during the year :—

	1920.	1921.
No. of mothers on register.....	995	1,598
No. of infants on register	995	1,598
Attendances of mothers.....	6,002	6,849
Attendances of infants	5,996	6,874
Visits of expectant mothers	61	85
Average weekly attendances (mothers)	115	131
Average weekly attendances (infants)	115	131

Treatment at the Maternity and Child Welfare Centres is kept as much as possible to a minimum, but there are several cases of minor ailments for which the family doctor is rarely consulted. These cases the mother frequently attempts to treat at home, often with unsatisfactory results, and it has been found that proper

attention given at the clinic has enabled the child to recover quickly with less risk of more serious complications. Attention is given at the clinic to such conditions as discharging eyes and ears, and venereal disease. In these cases the parents are often unable to afford the prolonged course of treatment necessary, and by endeavouring to treat the child themselves run great risk of doing permanent damage.

There were 774 infants and young children treated at the clinic during the year. In the summer, diarrhoea was the most frequent form of ailment, at other times bronchitis and other chest conditions. Of the total number of cases treated, 25 per cent. were diarrhoea, 24 per cent. malnutrition, 21 per cent. bronchitis, and 19 per cent. skin diseases, the remainder being discharging eyes and ears, rickets, gastric conditions, ulcerated mouth and venereal disease.

Supply of Milk.

There is no doubt that the supply of dried and fresh milk has greatly contributed to the decrease in the infant mortality rate. Many ill-nourished infants have quickly improved after receiving the regular supply of milk, showing that most cases of malnutrition are due to lack of this most necessary food.

During 1921, 33,129lbs. of dried milk were given free, and 30,799lbs. at slightly above cost price. In addition 2,968 gallons of fresh milk were supplied free.

An enormous increase in the amount of milk supplied occurred during the months of May, June, and July, during which period the mines were closed. In August the amount again fell, but for the remainder of the year the amount given each month was almost seven times as much as that given during the earlier months of the year.

The greatest possible care is taken in the investigation of the circumstances of applicants for free milk and the co-operation of the Clerk to the Guardians and Superintendent of the Labour Exchanges has been freely sought during the year.

Incidence of Certain Diseases.

26 cases of ophthalmia were notified during 1921 as compared with 50 during 1920. The ultimate result as regards the condition of the eyes is shown in the table on page 29. There were three cases of puerperal fever, of whom two died.

There were a considerable number of cases of measles and whooping cough, each of which was enquired into by the Health Visitors. The incidence of infantile diarrhoea was small, in spite of the exceptionally dry summer and the prevalence of conditions to which this disease is said to be attributable. There were 73 deaths from diarrhoea and enteritis among children under 2 years, a mortality of 21 per 1,000 births.

Home Visiting.

During 1921 the Health Visitors paid 15,254 visits to the homes of infants.

First visits (after notification of birth).....	3,554
Subsequent visits	11,700
Visits to expectant mothers	468

Of these 2,556 visits were made to the homes of babies attending the Infant Welfare Centre. In addition 318 visits were made in connection with infant deaths, and 105 in connection with still-births.

From the reports of the Health Visitors it is found that 94 per cent. of the infants are breast fed.

Work of Voluntary Agencies.

During a week in July, 1921, Baby Week was observed, and an exhibition was held at which lectures were given on matters relating to infant welfare. The organisation of Baby Week is carried out by the ladies of the South Shields Public Health Society, who also devoted one afternoon each fortnight during the greater part of the year to the teaching of some branches of mothercraft at the Infant Welfare Centre.

TABLE 7.—DEATHS DURING 1921 OF INFANTS UNDER ONE YEAR :
CAUSES AND AGES.

CAUSES OF DEATH.	Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 4 Weeks.	1-3 Months.	3-6 Months.	6-9 Months.	9-12 Months.	Total Deaths under 1 Year.
All Causes : Certified	78	25	18	11	132	54	48	36	46	316
Uncertified	6	1	..	1	8	4	5	1	1	19
Smallpox .....	..	..	..	..	..	..	..	..	..	..
Chickenpox .....	..	..	..	..	..	..	..	..	..	..
Measles .....	..	..	..	..	..	1	..	..	4	5
Scarlet fever .....	..	..	..	..	..	..	..	..	..	..
Whooping cough .....	..	..	..	..	..	4	3	1	8	..
Diphtheria and croup .....	..	..	..	..	..	..	..	..	..	..
Erysipelas .....	..	..	..	..	..	..	..	..	..	..
Tuberculous meningitis .....	..	..	..	..	..	..	1	..	1	..
Abdominal tuberculosis .....	..	..	..	..	..	..	..	1	1	..
Other tuberculous diseases .....	..	..	..	..	..	1	..	1	2	..
Meningitis (<i>not tuberculous</i>) ..	..	1	..	..	1	..	1	..	2	..
Convulsions	9	1	1	..	11	15	12	5	6	49
Laryngitis .....	..	..	..	..	..	1	..	..	1	..
Bronchitis .....	..	..	..	1	1	9	2	10	8	30
Pneumonia (all forms) .....	..	..	..	..	..	2	5	4	8	19
Diarrhoea .....	..	..	1	..	1	4	10	3	5	23
Enteritis .....	..	..	2	1	3	9	9	5	8	34
Gastritis .....	..	..	..	..	..	2	3	..	1	6
Syphilis .....	..	4	1	..	5	2	2	..	..	9
Rickets .....	..	..	..	..	..	..	..	..	..	..
Suffocation, overlying .....	..	..	..	1	1	..	..	..	..	1
Injury at birth	2	..	..	..	2	1	..	..	..	3
Atelectasis	4	..	2	..	6	..	..	..	..	6
Congenital malformations	2	1	1	2	6	..	2	..	2	10
Premature birth	46	13	8	4	71	6	..	..	..	77
Atrophy, debility & marasmus ..	20	6	2	3	31	6	1	..	..	38
Other causes	1	..	..	..	1	..	2	5	2	10
Total	84	26	18	12	140	58	53	37	47	335

Net Births in the Year :—

Legitimate 3,354
 Illegitimate 153

Net Deaths in the Year :—

Legitimate Infants 309
 Illegitimate Infants .. 26

TABLE 8.—DEATHS DURING 1921 OF INFANTS UNDER ONE YEAR:
CAUSES AND WARD DISTRIBUTION.

CAUSES OF DEATH.	WARDS.														Total
	Shields	Beacon	St. Hilda.	Hadrian	Holborn	Laygate.	Victoria.	Bents	Kekerdye.	Westoe	Deans	Tyne Dock.	Simonside.	West Park.	
ALL CAUSES—															
Certified.....	32	18	20	13	27	18	34	11	26	9	51	40	24	13	316
Uncertified. ....	..	3	2	1	2	1	1	..	3	..	4	..	1	1	19
Smallpox .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chickenpox .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles .....	..	..	3	..	1	..	..	..	..	..	1	..	..	..	5
Scarlet fever....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping cough .....	..	1	..	..	..	1	1	1	2	..	1	1	..	..	8
Diphtheria and croup .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Erysipelas .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tuberculous meningitis .....	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
Abdominal tuberculosis .....	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1
Other tuberculous diseases.....	1	..	1	..	..	..	..	..	..	..	..	..	..	..	2
Meningitis (<i>not tuberculous</i>) .....	..	1	..	..	..	..	..	..	..	..	..	1	..	..	2
Convulsions	5	1	4	1	2	1	4	1	4	1	4	12	4	5	49
Laryngitis .....	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1
Bronchitis	4	4	..	..	2	4	1	..	3	1	2	7	..	2	30
Pneumonia (all forms)	1	3	2	1	2	2	1	..	2	..	2	1	2	..	19
Diarrhoea	2	2	3	..	4	2	1	1	1	1	1	2	2	1	23
Enteritis	4	2	1	1	3	3	7	1	3	..	3	4	2	..	34
Gastritis .....	..	1	..	..	..	..	3	..	..	..	..	..	2	..	6
Syphilis	3	2	..	..	1	1	1	..	1	..	..	..	..	..	9
Rickets .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Suffocation, overlying .....	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1
Injury at birth.....	..	..	..	..	..	..	..	..	1	..	..	1	..	1	3
Atelectasis .....	..	..	..	1	1	..	2	1	..	1	..	..	..	..	6
Congenital malformations .....	..	1	1	1	..	..	2	..	2	1	1	1	..	..	10
Premature birth.....	9	2	6	5	7	3	8	4	5	4	10	5	7	2	77
Atrophy, debility and marasmus	2	1	1	4	6	1	2	..	4	..	8	4	3	2	38
Other causes.....	1	..	..	..	..	..	..	2	1	..	2	1	2	1	10
Total Deaths under one year.....	32	21	22	14	29	19	35	11	29	9	35	40	25	14	335
Number of Births*	255	241	192	249	207	268	319	149	299	185	351	315	219	217	3466
Infant Mortality Rate*	125	87	115	56	140	71	110	74	97	49	100	127	114	65	96
Total Deaths at all ages	174	103	112	119	134	113	139	107	142	93	152	164	133	115	1801

* The births dealt with in this table are (a) 2609 live births notified under the Notification of Births Acts, and (b) 857 registered and not previously notified. Elsewhere in this report the Registrar-General's figures of births registered during the calendar year have been used for the calculation of birth-rates.

SCHOOL MEDICAL SERVICE.

The staff of the school medical service was the same as detailed in my last report, except that Dr. J. G. Walker took over the duties of school medical inspection and treatment in the place of Dr. Wear, who was appointed Tuberculosis Officer, and an additional part-time Dentist, Mr. G. G. Robertson, was appointed. Dr. Walker took up his duties in October, and Mr. Robertson in September, 1921.

Details as to scope of the work, premises, co-ordination, etc., which are not specifically referred to in this report remain the same as in my previous report.

The following is a report on the work of the school medical service by Dr. Walker.

(A.) THE SCHOOL MEDICAL SERVICE IN RELATION TO PUBLIC ELEMENTARY SCHOOLS.

Medical Inspection.

Number of children on the registers at the end of 1921	22,440
Average attendance for the year	20,195
*Number of elementary schools	25
Number of departments	55

* Including one school in the area recently added to the Borough.

The total number of individual elementary school children inspected during the year was 12,722.

Routine Inspections ..	{	Entrants	2,971
		Intermediates	2,105
		Leavers	2,188
Special Inspections ..	{	Special cases	6,911
		Children re-examined	3,174

The special cases are those children referred to the School Medical Officer by various agencies; the principal being Head Teachers, Attendance Officers, Health Visitors, Medical Practitioners, as well as a large number of children brought to the clinics by their parents.

During the latter part of the year there was an appreciable increase in the attendance at the clinics and the accommodation at many times was totally inadequate. There is only one room

available for the doctor, two nurses and two clerks. This room is frequently overcrowded. The children are obliged to wait in a draughty corridor, a very unsatisfactory arrangement considering the state of health many of them are in. It is to be hoped that some means will be found before long to increase the accommodation at the clinic. The present conditions are not conducive to good work. The increased number of cases can be largely accounted for by the unemployment prevailing in the Borough, resulting in widespread distress.

Details of the cases are given in the tables on pages 63 to 73.

During routine medical inspections, the schedule of the Board of Education is complied with. School arrangements are disturbed as little as possible. The willing co-operation of the Head Teachers in providing suitable accommodation, and assisting with any facts in the medical history of the child under examination which may be known to them, greatly facilitates the work of the School Medical Officer.

Absentees from routine medical inspection are examined during the school holidays.

Findings of Medical Inspection.

Uncleanliness.—As the parents receive notice of impending medical inspection the children often come specially prepared for the occasion.

Arrangements have been made for a cleanliness survey by the Health Visitors of all the public elementary schools in the Borough twice a year. On account of pressure of other work it was only possible to carry out one survey during 1921. The surveys are carried out under Section 122 of the Children Act, 1908, and every child is examined. Those who are verminous or otherwise unclean are given a notice with instructions as to the remedy. These children are again examined in about a week, and those who have not been properly cleansed are given another notice. A third examination is made about a week later and those who are still unclean are liable to be compulsorily cleansed. It is acknowledged that these measures taken to insure the cleanliness of the children have had a most beneficial effect.

When the scheme was commenced there were a number of objections from the parents, but when it was found that individual children were not particularised in the inspection the parents realised that their interests were being safeguarded, and they at once began to respond to the advice given.

Tonsils and Adenoids.—The number of children suffering from abnormal conditions of these was :

Enlarged tonsils	291
Adenoids	195
Enlarged tonsils plus adenoids	218

These conditions are frequently associated with conditions such as defective hearing, defective speech, mental dullness, deformed chests and chronic bronchitis.

Tuberculosis.—All definite or suspected cases are referred to the Tuberculosis Officer. During the year 99 definite and 40 suspected cases of the pulmonary type were observed, in addition to which there were 102 cases of the non-pulmonary type. The results of the early detection of these cases should prove of inestimable value.

Skin Disease.—Impetigo, scabies and ringworm form the great majority of skin defects. The two former diseases show a decline, whilst the latter shows an increase compared with the figures for the previous year.

External Eye Disease, Blepharitis.—218 cases of this disfiguring condition were found during the year, and it is a matter of surprise that many parents ignore such an obvious defect for so long before seeking advice. In many cases permanent damage has been done. *Conjunctivitis* accounted for 130 cases. Other conditions are detailed in the attached tables.

Defective Vision.—504 cases of defective vision and 179 cases of strabismus were found. It is regrettable that in many cases of the latter permanent damage had been done to the affected eye before the parents sought advice.

Dental Defects.—2,876 children were inspected by the School Dental Surgeons. At routine medical inspections 4,138 children were noted to be suffering from dental defects. The use of the toothbrush appears to be on the increase among the children.

In August, 1921, an additional part-time Dental Surgeon was appointed. Four sessions per week are now devoted to dental inspection and treatment.

Crippling Defects.—Most of these cases are caused by tuberculosis, infantile paralysis or rickets. Accidents or congenital defects account for the remainder.

Other Conditions.—608 cases of anaemia were noted ; 897 cases of respiratory diseases other than tuberculosis ; organic and

functional disorders of the heart, and other diseases which are given in the tables on pages 65 to 66.

Previous Infectious Fevers.—Information derived from the medical history of the children examined at routine inspections showed that :—

3,357	or	46	per cent.	had had	measles.
1,499	„	21	„	„	whooping cough.
712	„	10	„	„	chickenpox.
387	„	5	„	„	scarlet fever.
52	„	0.7	„	„	diphtheria.

Vaccination.—2,515 or 34 per cent. of those examined were unvaccinated. The figures for the previous year were 27 per cent.

Infectious Diseases.—Co-operation between the Public Health Department and the schools is of the closest order. The Head Teacher reports to the Medical Officer of Health any case of infectious disease occurring in the school. A Health Visitor or Sanitary Inspector then visits the home of the child and precautions are taken to prevent the spread of infection.

The Medical Officer notifies the Head Teacher of any case of notifiable infectious disease in the home of a school child, informing him of the date on which the child may be allowed to return to school.

Following-up.—The School Medical Officer informs the parents verbally or by letter of any defect found, and advises that medical advice be sought. A good many children are taken to their family doctor, others, especially with minor ailments, attend the clinic. The Health Visitors make enquiries later at the homes as to the result.

Medical Treatment.

In tables 12 and 13 details of the treatment and results are given.

The total number of individual children attending the general clinics was 2,647. The actual number of attendances was 16,114.

Minor Ailments.—Skin troubles form the bulk of the cases. Syrup Ferri Phosph. Co. is supplied to certain debilitated children, and latterly it was found necessary to dispense an expectorant mixture to bronchitic cases as an emergency measure on account of the inability of many parents to afford private medical attendance.

Tonsils and Adenoids.—A special surgical clinic in charge of a part-time operating surgeon is held on Monday mornings to carry out the surgical treatment of these conditions. The arrangements are the same as described in the 1920 report. During 1921, 216 cases were operated upon. Of these, 102 had both tonsils and adenoids removed, 60 had both tonsils, and 7 one tonsil removed, while in 47 cases adenoids only were removed.

Tuberculosis.—Co-ordination between the school medical service and the tuberculosis clinic is very close. All definite or suspected cases are referred to the Tuberculosis Officer and reap the benefit of this specialised service.

Skin Diseases.—Ringworm.—203 cases of ringworm of the head were treated at the clinic during the year. Of these, 88 were treated by the X-Ray method. In addition, 108 cases of ringworm of the body were satisfactorily treated at the clinic.

Scabies.—171 cases were treated during the year, a figure considerably below that of the previous year, and considering the increase in the number of children inspected would indicate a decline in the prevalence of this affection.

Impetigo contagiosa.—607 cases of this condition, so prevalent among school children, were treated. This figure also shows a decrease as compared with that for the previous year.

Vision.—The treatment of visual defects forms a most important branch of the work of school medical inspection.

The number of cases submitted to refraction was 369

The number of prescriptions supplied was 352

Spectacles were supplied free of charge in 152 cases. The parents of the remainder of the children provided either the whole or part of the cost.

Ear Disease.—Chronic otitis media often aggravated by long continued neglect accounted for most of the cases. The number of cases of ear disease treated was 215.

Dental Defects.—During the period under revision 1,403 children were referred for treatment, and 1,059 were treated. 128 permanent and 464 temporary teeth were extracted by the Dentists of the Local Education Authority. In 508 cases teeth were filled. There were 13 cases in which a general anaesthetic was required.

Crippling Defects.—In the majority of cases treatment is beyond the scope of the school medical service. Parents are

directed as to the best means of obtaining treatment if such is indicated, and in some cases advised as to remedial exercises to ameliorate the condition present.

Other Defects.—The following table gives details of other defects which were referred for treatment and treated. It will be observed that a very large percentage suffered from anaemia and debility; no doubt this was due to the lack of proper nourishment on account of the industrial situation. It was found necessary to supply Syrup Ferri Phosph. Co. for this condition. In this connection it should be remembered that there are no medical organisations—beyond the Infirmary—for the supply of medicines and medical requisites, as are to be found in most other large towns.

Of the 1,015 children referred for treatment of “other defects” 859 were treated; of these, 788 received treatment at the school clinic. 156 had not been treated at the end of the year.

Disease or Defect.	Number of Children.			
	Referred for treat- ment.	Treated.		
		Under L.E.A. Scheme.	Other- wise.	Total.
Anaemia and debility	446	374	4	378
Tuberculosis: Pulmonary				
Definite.....	71	70	1	71
Suspected ..	37	35	2	37
Non-pulmonary	68	54	4	58
Lung disease (not tuberculous)	189	124	25	149
Enlarged glands	98	95	3	98
Scarlet fever	3	..	2	2
Diphtheria	3	..	3	3
Whooping cough	18	3	11	14
Chickenpox	9	3	4	7
Heart diseases	18	2	4	6
Diseases of nervous system.....	23	15	4	19
Deformities	26	13	1	14
Defective speech	3	..	..	..
Hernia.....	2	..	2	2
Rectal polypus	1	..	1	1
TOTAL	1,015	788	71	859

Treatment of Uncleanliness.—The nurses visited all the elementary departments during the year, each department being visited on an average three times in connection with the uncleanliness surveys referred to on page 55. The total number of individual children examined was 21,286; the number of examinations was 29,770, including 8,484 re-examinations of dirty or verminous

children. The number of children found to have unclean clothing was 312. Those having nits or vermin on head or clothes numbered 4,086, while those who had nits and vermin on head and clothes numbered 256. Notices were sent to the parents or guardians in the case of 15 children who were unclean or verminous, to the effect that unless properly cleansed within a certain period the children would be compulsorily cleansed at the Authority's Cleansing Station. Of these 15 children, 4 were compulsorily cleansed. No legal proceedings were taken under the Children Act, 1908, or Byelaws.

Open-Air Education.

There are full details of the scheme for the provision of an open-air school in the report for 1920. It is a matter of considerable regret that local and national conditions have so far militated against any further progress in the plan. Open-air classes are held during the summer months in many of the elementary schools, whilst play-centres for the children and organised school journeys are other methods adopted to reap the many advantages of open-air.

Physical Training.

No arrangements have been made for co-ordinating the school medical service with the physical training received by the children. In certain cases it was considered advisable to modify the training or to exempt children.

Provision of Meals.

On account of the industrial depression during 1921 it was found necessary to very largely increase the supply of free meals. A good dinner was provided daily at the National Kitchen and at one of the schools. A large number attended also at various cafes in the Borough. The meals were frequently inspected, and were of sufficient quality and quantity. The arrangements as to investigation of the cases were carried out by the School Attendance Department. In all 4,406 children received free meals. The total number of meals provided was 324,276 at a cost of £8,106 18s. 0d.

School Baths.

Baths are provided in one school in the poorest part of the Borough. Children also attend the Corporation Swimming Baths, under the care of their teachers, and have the advantage of in-

struction from a special Swimming Instructor appointed by the Local Education Authority. This excellent exercise is of great value to their physical well-being. During the year 37,187 school children attended the baths, a very considerable increase on the previous year's attendances (16,136).

Co-operation of Parents.

On the whole the attitude of parents was very satisfactory, most of them expressing a desire to assist in any way possible. Only two cases occurred at elementary schools in which the parents objected to an examination of the child being made.

Parents attended routine inspections in 4,562 or 63 per cent. of cases.

There is a decrease in the amount received from parents towards the cost of treatment. This is altogether due to the depression in the industrial world.

The amounts obtained for the year were :—

	£	s.	d.
Eye Clinic.....	32	14	0
Surgical Clinic	25	7	6
Dental Clinic	11	8	4
General Clinic	14	9	6
	<hr/>		
	£83	19	4
	<hr/>		

Co-operation of Teachers.

It is very gratifying to note the interest taken by the teachers in the health of the children under their care. Their assistance is often of the greatest value, and many defects come to light, which, but for their zeal, might have been overlooked.

School Attendance Officers.

Mr. Willits (the Superintendent Officer) and his assistants have rendered valuable help, especially in following up cases, and in providing information regarding cripples and defective children.

Co-operation of Voluntary Bodies.

National Society for Prevention of Cruelty to Children.—The local Inspector of the Society renders valuable assistance in those cases of neglect which it was found necessary to report to him.

The Shoeless Children Fund.—This most deserving organisation performs excellent work on behalf of the poor children of the Borough, and children without satisfactory footwear are frequently

sent by the School Medical Officer. The Hon. Secretary, Wm. Scott, Esq., O.B.E., informs me that 936 children were each supplied with one pair of boots and stockings.

(B) BLIND, DEAF AND DEFECTIVE CHILDREN.

Table 11 is self-explanatory, and gives the number of exceptional cases within the area at the end of 1921. There are no schools for such children in the Borough, but the Local Education Authority contracts with special schools elsewhere.

(C) SECONDARY SCHOOLS.

The arrangements for the routine medical inspection, following-up and combating infectious diseases are similar to those adopted in the elementary schools. The sanitary arrangements and accommodation in the higher schools of the Borough are satisfactory.

Number of pupils on registers at end of 1921	714
Number examined at routine inspections	633
Number of children having defects which required treatment or observation	201

Twenty objections to medical inspection were received from parents.

The number of parents attending routine inspections was 237 or 37 per cent. The majority take their children to the family medical attendant for any treatment required.

The only treatment given at the Authority's clinics to children from higher schools was in connection with two refractions.

(D) EMPLOYMENT OF CHILDREN AND YOUNG PERSONS.

Byelaws have been made and are in operation regarding the employment of children. These were described in the last report, and the conditions are substantially the same at present.

(E) MISCELLANEOUS.

Examination of Pupil Teachers and Scholarship Candidates.

46 pupil teachers and bursar candidates were examined during the year. Of these 4 had defective vision.

41 scholarship candidates were also examined.

Visits of School Nurses.

The Health Visitors in their capacity as school nurses paid 147 visits to the schools in connection with routine medical inspection, etc. 886 visits were paid to the homes of the children in connection with "following-up."

ELEMENTARY SCHOOLS.

TABLE 9.—NUMBER OF CHILDREN INSPECTED 1st JAN., 1921, TO 31st DECEMBER, 1921.

A.—ROUTINE MEDICAL INSPECTION.

Age.	Entrants.					
	3.	4.	5.	6.	Other Ages.	Total.
Boys .....	..	153	767	420	137	1,477
Girls	2	152	702	480	158	1,494
Totals	2	305	1,469	900	295	2,971

Age.	Inter- mediate Group.	Leavers.					Grand Total
	8.	12.	13.	14.	Other Ages.	Total	
Boys	1,057	42	966	70	1	1,079	3,613
Girls	1,048	136	941	28	4	1,109	3,651
Totals	2,105	178	1,907	98	5	2,188	7,264

B.—SPECIAL INSPECTIONS.

	Special Cases.	Re-examinations (i.e., No. of Children re-examined).
Boys	3,501	1,499
Girls	3,410	1,675
Totals	6,911	3,174

C.—TOTAL NUMBER OF INDIVIDUAL CHILDREN INSPECTED BY THE MEDICAL OFFICER, WHETHER AS ROUTINE OR SPECIAL CASES (NO CHILD BEING COUNTED MORE THAN ONCE IN ONE YEAR).

No. of Individual Children Inspected. 12,722

HIGHER SCHOOLS.

TABLE 9.—NUMBER OF CHILDREN INSPECTED 1st JAN.,
1921, TO 31st DECEMBER, 1921.

A.—ROUTINE MEDICAL INSPECTION.

	Age.																	Total
	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19			
Boys	1	2	..	4	8	5	17	63	105	44	58	33	5	2	1	348		
Girls .....	..	..	..	..	..	..	3	71	52	62	45	34	17	1	..	285
Totals	1	2	..	4	8	5	20	134	157	106	103	67	22	3	1	633		

B.—SPECIAL INSPECTIONS—NIL.

C.—TOTAL NUMBER OF INDIVIDUAL CHILDREN
INSPECTED BY THE MEDICAL OFFICER—633.

ELEMENTARY AND HIGHER SCHOOLS.

TABLE 10.—RETURN OF DEFECTS FOUND IN THE COURSE OF MEDICAL INSPECTION IN 1921.

Defect or Disease.		Routine Inspections.				Specials.	
		Number referred for treatment.	Number requiring to be kept under observation but not referred for treatment.	Number referred for treatment.	Number requiring to be kept under observation but not referred for treatment.		
						El.	Hr.	El.	Hr.	Elementary.
Skin	Malnutrition .....	..	..	1	..	..	..
	Uncleanliness—						
	Head	18	..	428	4	22	..
	Body	11	..	406	1	2	..
	Ringworm—						
	Head	6	..	17	..	203	..
	Body	3	..	11	..	106	..
	Scabies	4	..	13	..	172	..
	Impetigo	13	..	74	1	607	..
	Other diseases (non-tuberculous) ..	10	..	88	5	698	..
Eye	Blepharitis	6	..	94	..	118	..
	Conjunctivitis	2	..	22	..	106	..
	Keratitis	1	..	..	..	8	..
	Corneal ulcer	2	..	..	..	29	..
	Corneal opacities ..	..	..	4	..	..	..
Ear	Defective vision....	271	15	..	..	233	..
	Squint	66	..	69	..	44	..
	Other conditions ..	6	..	43	..	64	..
	Defective hearing ..	8	..	174	7	46	..
	Otitis media	26	..	34	2	156	..
Nose and Throat	Other ear disease ..	7	..	10	..	14	..
	Enlarged tonsils ..	110	6	115	83	66	..
	Adenoids.....	49	3	95	5	51	..
	Enlarged tonsils & adenoids..	90	1	..	..	128	..
	Other conditions ..	6	1	128	7	76	..
Enlarged	cervical glands (non-tuberculous)	2	..	338	9	96	..
Defective	speech .....	..	..	53	6	3	..
Heart & Circulation.	Heart disease—						
	Organic .....	..	..	16	..	..	..
	Functional	5	..	52	2	13	..
	Anaemia	5	..	162	27	441	..
Lungs	Bronchitis	12	..	615	14	168	..
	Other non-tuberculous diseases	1	..	95	..	6	..

TABLE 10.—CONTINUED.

Defect or Disease.		Routine Inspections.				Specials.	
		Number referred for treatment.		Number requiring to be kept under observation but not referred for treatment.		Number referred for treatment.	Number requiring to be kept under observation but not referred for treatment.
		El.	Hr.	El.	Hr.	Elementary.	
Tuber- culosis	Pulmonary—						
	Definite	6	1	28	..	65	..
	Suspected	2	..	3	..	35	..
	Non-pulmonary—						
	Glands.....	3	..	10	..	15	..
	Spine .....	..	..	..	..	5	..
	Hip .....	..	..	..	..	..	..
Nervous System	Other bones & joints	..	..	9	..	10	..
	Skin	2	..	..	..	1	..
	Other forms ....	..	..	15	..	32	..
	Epilepsy .....	..	..	3	..	3	..
Deformi- ties.	Chorea.....	..	..	2	..	17	..
	Other conditions ..	1	..	1	..	2	..
	Rickets	1	..	70	1	8	..
Other defects and diseases	Spinal curvature ..	1	..	..	..	..	..
	Other forms .....	..	1	98	8	15	..
		10	..	134	11	211	..

NUMBER OF INDIVIDUAL CHILDREN having defects which required treatment or to be kept under observation :—

Elementary Schools 7,707

Higher Schools 201

El.—Elementary.

Hr.—Higher.

ELEMENTARY SCHOOLS.

TABLE 11.—NUMERICAL RETURN OF ALL EXCEPTIONAL CHILDREN IN THE AREA IN 1921.

			Boys.	Girls.	Total.	
Blind (including partially blind within the meaning of the Elementary Education (Blind and Deaf Children) Act, 1893.		Attending public elementary schools	17	11	28	
		Attending certified schools for the blind	6	3	9	
		Not at school	3	1	4	
Deaf and Dumb (including partially deaf) within the meaning of the Elementary Education (Blind and Deaf Children) Act, 1893.		Attending public elementary schools	11	9	20	
		Attending certified schools for the deaf	6	13	19	
		Not at school	2	..	2	
Mentally Deficient.	Feeble minded.	Attending public elementary schools	37	20	57	
		Attending certified schools for mentally defective children	2	..	2	
		Notified to the Local Control Authority by Local Education Authority during the year .....	..	..	..
		Not at school	3	3	6	
	Imbeciles.	At school .....	..	..	..
		Not at school	2	..	2	
		Notified to Local Control Authority .....	..	..	..
	Idiots.	Notified to Local Control Authority .....	..	..	..
		Not at school .....	..	..	..
	Epileptics.		Attending public elementary schools	4	3	7
			Attending certified schools for epileptics
			In institutions other than certified schools
Not at school			1	2	3	

TABLE 11.—CONTINUED.

			Boys.	Girls.	Total.
Physically Defective.	Pulmonary Tuberculosis	Attending public elementary schools	91	71	162
		Attending certified schools for physically defective children	..	..	..
		In institutions other than certified schools.....	3	2	5
		Not at school	51	42	93
	Crippling due to Tuberculosis	Attending public elementary schools	113	84	197
		Attending certified schools for physically defective children	..	..	..
		In institutions other than certified schools.....	1	3	4
		Not at school	37	27	64
	Crippling due to other causes than tuberculosis, i.e., paralysis, rickets, traumatism.	Attending public elementary schools	37	28	65
		Attending certified schools for physically defective children	4	..	4
		In institutions other than certified schools.....	..	..	..
		Not at school .....	..	..	..
	Other physically defectives, e.g., delicate and other children suitable for admission to Open-air schools, children suffering from severe heart disease.	Attending public elementary schools	40	43	83
		Attending Open-air schools ..	..	..	..
		Attending certified schools for physically defective children other than Open-air schools..	..	..	..
		Not at school	22	21	43
Dull or backward *		Retarded 2 years.....	138	81	219
		Retarded 3 years.....	67	39	106
		Retarded more than 3 years †	17	21	38

* Judged according to age and standard.

† Examined by Medical Officer, not mentally defective.

ELEMENTARY SCHOOLS.

TABLE 12.—TREATMENT OF DEFECTS OF CHILDREN
DURING 1921.

A.—TREATMENT OF MINOR AILMENTS.

Disease or Defect.	Number of Children.			
	Referred for treatment.	Treated.		
		Under Local Education Authority's Scheme.	Otherwise	Total.
SKIN—				
Ringworm : Head	209	203	6	209
Body	109	108	1	109
Scabies	176	171	6	177
Minor injuries	25	21	1	22
Impetigo	620	607	2	609
Other skin disease..	708	701	7	708
EAR DISEASE	257	215	26	241
EYE DISEASE (external and other)	342	317	25	342
Miscellaneous	157	90	21	111

B.—TREATMENT OF VISUAL DEFECT.

Number of Children.									
Referred for Refraction.	Submitted to Refraction.				For whom glasses were prescribed.	For whom glasses were provided.	Recommended for treatment other than by glasses.	Received other forms of treatment.	For whom no treatment was considered necessary.
	Under L.E.A. Scheme, Clinic or Hospital.	By Private Practitioner or Hospital.	Otherwise.	Total.					
599	369	9	..	378	352	350	6	..	20

TABLE 12.—CONTINUED.

C.—TREATMENT OF DEFECTS OF NOSE AND THROAT.

Referred for treatment.	Number of Children.			
	Received operative treatment.			Received other forms of treatment
	Under Local Education Authority's Scheme, Clinic, or Hospital.	By Private Practitioner or Hospital.	Total.	
576	216	24	230	125

D.—TREATMENT OF DENTAL DEFECTS.

1.—Number of Children dealt with.

	Age Groups.											"Specials."	Total.
	5	6	7	8	9	10	11	12	13	14			
(a) Inspected by dentist..	..	1035	1420	129	10	..	..	..	..	..	282	2876	
(b) Referred for treatment	1057											346	1403
(c) Actually treated.....	711											346	1057
(d) Re-treated (result of periodical examination)	..											..	..

2.—Particulars of time given and of Operations undertaken.

No. of half-days devoted to inspection.	No. of half-days devoted to treatment.	Total number of attendances made by the children at the Clinic.	No. of Permanent Teeth.		No. of Temporary Teeth.		Total No. of Fillings.	No. of Administrations of General Anaesthetics included in 4 and 6.	No. of other operations.	
			Extracted.	Filled.	Extracted.	Filled.			Permanent Teeth.	Temporary Teeth.
43	74	1,094	128	508	464	..	508	13	49	..

HIGHER SCHOOLS.

TABLE 12.—TREATMENT OF DEFECTS OF CHILDREN DURING 1921.

A. AND F.—TREATMENT OF MINOR AND OTHER DEFECTS.

Disease or Defect.	Number of Children.			
	Referred for treatment.	Treated.		
		Under Local Education Authority's Scheme.	Otherwise.	Total.
Pulmonary tuberculosis	1	..	1	1
Deformity	1	..	..	..

B.—TREATMENT OF VISUAL DEFECTS.

Number of Children.						
Referred for Refraction.	Submitted to Refraction.			For whom glasses were prescribed.	For whom glasses were provided.	For whom no treatment was considered necessary.
	Under L.E.A. Scheme, Clinic, or Hospital.	By Private Practitioner or Hospital.	Total			
15	2	3	5	4	4	1

C.—TREATMENT OF DEFECTS OF NOSE AND THROAT.

Number of Children.				
Referred for treatment.	Received operative treatment.			Received other forms of treatment.
	Under Local Education Authority's Scheme, Clinic, or Hospital.	By Private Practitioner or Hospital.	Total.	
11	..	2	2	1

ELEMENTARY SCHOOLS.

TABLE 13.—SUMMARY OF TREATMENT OF DEFECTS.

	Number of Children.			
	Referred for treatment.	Treated.		
		Under Local Education Authority's scheme.	Otherwise.	Total.
Minor ailments	2,603	2,433	95	2,528
Visual defects	614	369	9	378
Defects of nose & throat	576	286	69	355
Dental defects	1,403	1,008	49	1,057
Other defects	1,015	788	71	859
Total	6,211	4,884	293	5,177

ELEMENTARY AND HIGHER SCHOOLS.

TABLE 14.—SUMMARY RELATING TO CHILDREN MEDICALLY INSPECTED AT THE ROUTINE INSPECTIONS DURING THE YEAR 1921.

	Elem.	Higher.
(1) The total number of children medically inspected at the Routine Inspections.....	7,264	633
(2) The number of children in (1) suffering from defects (other than uncleanness or defective clothing or footgear) who require to be kept under observation (but not referred for treatment)	2,527	170
(3) The number of children in (1) suffering from :—		
Malnutrition	1	..
Skin disease	239	6
Defective vision (including squint)	406	15
Eye disease	180	..
Defective hearing	182	7
Ear disease	77	2
Nose and throat disease	593	106
Enlarged cervical glands (non-tuberculous)..	340	9
Defective speech	53	6
Dental disease	4,138	252
Heart disease :—		
Organic	16	..
Functional	57	2
Anaemia	167	27
Lung disease (non-tuberculous)	723	14
Tuberculosis :—		
Pulmonary : definite	34	1
suspected	5	..
Non-pulmonary	39	..
Disease of the nervous system.....	7	..
Deformities	170	10
Other defects and diseases	144	11
(4) The number of children in (1) who were referred for treatment (excluding uncleanness, defective clothing, etc.)	717	14
(5) The number of children in (4) who received treatment for one or more defects, (excluding uncleanness, defective clothing, etc.).....	368	7

SANITARY ADMINISTRATION.

Staff.

A list of the staff of the Public Health Service is given on page 2.

Summaries of the visits of the Sanitary Inspectors, notices served, and structural improvements effected are given in the tables on pages 80 and 82.

Adoptive and Local Acts, Byelaws and Regulations in force in the Borough.

A complete list of the adoptive Acts, etc., was published in my Annual Report for 1920. Sections 51 and 92 of the Public Health Acts Amendment Act, 1907, were adopted on 11th March, 1921.

The South Shields Corporation Act, 1921, received Royal Assent on 19th August, 1921.

Nuisances under the Public Health Acts and Byelaws—Offences by Occupiers.

It has been stated that where a tenant has allowed a house to get into a thoroughly dirty condition, through neglect or idleness, the owner is called upon to remedy the nuisance. In order that their responsibilities might be brought home to certain tenants I found it necessary to ask that powers be given to take summary proceedings in those cases where the occupier was at fault. The Health Committee accordingly passed a resolution as follows:—
“That where it appears to the Chairman of the Health Committee and Medical Officer of Health a nuisance exists on premises caused by the default of tenants or occupiers thereof, they be authorised to instruct the Town Clerk (in the event of a notice to abate the nuisance not having been complied with) to institute proceedings against the offenders, either under the Byelaws or the Public Health Acts as may be considered advisable.” By this authority an anomalous position has been cleared up, and by exercising the power in one or two bad cases much good no doubt will result.

In the past there have been difficulties in the way of properly penalising the careless and dirty householder, and they arose through the delay involved by procedure. Firstly, it was usual for the Sanitary Inspector to serve notice on the offender requesting the house, drain, privy, or yard, or other appurtenances to be cleansed within a brief period. These preliminary and informal

notices, on blue forms, were often effective. Sometimes recalcitrant tenants stubbornly refused to abate the nuisance, and the next step was to place the matter before the Health Committee at their next meeting. Any resolution by the Health Committee required confirmation by the Council.

Thus anything from four to eight weeks might elapse before action could be taken. Meanwhile the occupier might have left the house or after all the delay, the nuisance might be remedied, just in time to prevent legal action being taken. Three particular cases occurred during 1921. In each instance a single man lived alone, and allowed his room to become a veritable ashpit. Magistrates' orders were required before the Inspector could enter the premises. Fortunately, by much persistency and justifiable bluff on the part of the Inspector, the man in each case was persuaded to clean up. The time of the Inspector is in this way occupied when he might be engaged on his district.

Water Carriage System.

20 conversions of privy receptacles into water closets and replacements on account of nuisances were made during the year. Details are given in the summary of Inspectors' reports.

Early in 1921 the question of converting the present privy system into the water carriage system was before the Council. A report by the Town Clerk, Borough Surveyor, and myself was prepared and presented. After consideration the Council decided that the time was inopportune on account of the industrial depression, and of the fact that the work would give employment to a comparatively small number of the unemployed. The conversion was therefore postponed. It is to be hoped, however, that the present insanitary system will not be allowed to continue longer than is absolutely necessary.

Theatres, Cinemas, and Music Halls.

A complete survey of these places was carried out by the Inspectors during the year. There were in the Borough two theatres, 13 cinemas, 1 music hall, and 1 skating rink, with seating accommodation for about 13,500 people.

Several sanitary defects were remedied, and improvements effected.

Although it is necessary that daylight should be excluded during the performances in the afternoon and evening, there does not seem to be any reason why suitable arrangements should not be made for admitting daylight and sunshine during the greater part of the day when the building is closed to the public.

Some modern cinemas have adopted elaborate arrangements for ventilation, the value of which would be enhanced if it were possible to flood the building with daylight. If such places of amusement were required to provide suitable windows, which could be conveniently darkened, and to uncover the windows at reasonable times when no performance is in progress it would be a great improvement.

Offensive Trades.

Section 51 of the Public Health Acts Amendment Act, 1907, was adopted by the Council on 11th March, 1921. The offensive trades included in the Order subsequently approved by the Ministry of Health were Fish Frier, Rag and Bone Dealer, Gut-scraper, Glue-maker, and Size-maker. In an industrial community there is a certain demand for fried fish shops, and it is most desirable that a certain standard should be required before such places are established, no less than a standard of cleanliness in the trade itself.

The preparation of Byelaws governing the various trades were not complete before the end of the year.

Common Lodging Houses.

At the end of the year there were 13 occupied registered Common Lodging Houses in the Borough, with accommodation for 542 lodgers in 95 registered rooms. At only one of these houses is there accommodation for female lodgers, the number provided for being 7.

The registration of eight of the keepers of these lodging houses is renewable annually under section 69 (2) of the Public Health Acts Amendment Act, 1907.

During the past year the Sanitary Inspectors paid 119 visits, while the visits by the special officer of the police numbered 462. There was one prosecution by the police for an offence against the Byelaws governing these houses—allowing the kitchen to be used as a sleeping apartment. A fine of 10s. was imposed.

Seamen's Lodging Houses.

There were 50 occupied seamen's lodging houses in the Borough at the end of 1921, with accommodation for 608 seamen in 184 rooms.

The Sanitary Inspectors paid 277 visits and served notices for structural defects at two of these houses.

The police paid 1,751 visits to seamen's lodging houses. There were no prosecutions for offences against the Byelaws.

Factories, Workshops, etc.

VISITS.

The Inspectors paid 1,046 visits during the year. Written notices were sent out in 12 cases. There were no prosecutions. The details are as follows :—

1. Factories (including Factory Laundries).
Inspections, 140 ; Notices, 2.
2. Workshops (including Workshop Laundries).
Inspections, 499 ; Notices, 9.
3. Workplaces (other than Outworkers' Premises).
Inspections, 397 ; Notices, 1.

DEFECTS FOUND.

The defects and nuisances found are summarised below :—

Particulars of Defect.	Number of Defects.			
	Found.	Remedied.	Receiving Attention.	Referred to H.M. Inspector.
<i>Nuisances under the Public Health Acts :*</i>				
Want of cleanliness.....	8	8	..	..
Want of ventilation	2	1	1	..
Overcrowding .....	..	..	..	..
Want of drainage of floors.....	1	..	1	..
Other nuisances	4	4	..	..
Sanitary accommodation—				
Insufficient	6	1	5	..
Unsuitable or defective.....	7	4	3	..
Not separate for sexes	3	..	3	..
<i>Offences under the Factory and Workshop Acts :</i>				
Illegal occupation of underground bakehouse (s. 101) .....	..	..	..	..
Breach of special sanitary requirements for bakehouses (s. 97 to 100)	2	1	1	..
Other offences (excluding offences relating to Outwork).....	..	..	..	..
Total	33	19	14	..

* Including those specified in sections 2, 3, 7, and 8 of the Factory and Workshop Act, 1901, as remediable under the Public Health Acts.

REGISTERED WORKSHOPS.

The number of workshops on the register at the end of the year was 329. The principal trades are :—

Dressmakers	48
Tailors	27
Milliners	33
Boot Repairers	21
Bakehouses	64
Joiners	25
Cabinet-makers and Upholsterers.....	9
Smiths	11

OUTWORK.

Five employers sent in lists once in the year. The total number of home-workers so reported was 6 ; all engaged in the making or altering of wearing apparel.

Inspection under Shops Acts.

The Shops Orders in force in the Borough were detailed in my Annual Report for 1920. During the past year a Closing Order for Pork Butchers' Shops was made and subsequently confirmed by the Home Office. A new Closing Order for Butchers' Shops (made in 1920), was also approved last year, and the Butchers' Closing Order of 1915 was revoked in consequence. There are thus nine local Orders in operation in the town.

A petition was received from local retailers of fruit, applying to the Town Council to make a Closing Order for Fruiterers' Shops, but as the requisite number of occupiers of shops affected by the proposed Order did not signify their approval no Order was made.

The Shops (Early Closing) Act, 1920, was continued in force by the Expiring Laws Continuance Act, 1921, and the Shops (Early Closing) Act (1920) Amendment Act, 1921, was passed extending the hours during which sweets and other sugar confectionery may be sold.

The following is a summary of the work of the Shops Inspector during the past year :—

Number of shops on register at 31st December	2,493
(In about 45 per cent. of these shops assistants are employed).	
Number of visits paid to shops by Inspector (including stalls in Market Place, and stalls and cafes on North and South Beach)	5,369

Interviews and appointments	292
Complaints received and investigated	48

Infringements of the Shops Acts and Orders—

Assistants employed about the business of shop on their weekly half-holiday	4
Prescribed forms as to assistants' half-holiday not exhibited	46
Prescribed forms not kept up-to-date	55
Assistants not having proper meal hours	2
Young persons working excessive hours .....	..
Non-observance of weekly half-holiday	2
No weekly half-holiday notices exhibited	12
Selling non-perishable goods on closing day .....	..
Infringements of Early Closing Act, 1920	5
„ Butchers' Closing Order	15

TOTAL	141
-------------	-----

All but two of the above infringements were first offences. In every case the persons in default were cautioned by the Inspector either verbally or by written intimation, and the infringements reported to the Health Committee. Nine letters of caution were sent by the Town Clerk. The Committee authorised the Chief Constable to institute proceedings in three cases, in each of which a fine was imposed.

TABLE 15.—NOTICES ISSUED BY SANITARY INSPECTORS.

	W. Clark.	R. W. Weir	R. Ayre.	W. Hill.	Totals.
Preliminary Notices were served— (A.) On 484 Property Owners for— (1) Houses not kept in all respects reasonably fit for habitation—No. of houses.....					
	94	21	99	86	300
No. of defects (including defective roofs, spouts, floors, stairs, windows, doors, ranges, etc.).....					
(2) Scamper's Lodging Houses :	184	43	283	199	709
No. of houses .....	..	..	..	2	2
No. of defects .....	..	..	..	10	10
(3) Nuisances caused by—					
choked or defective drain	7	9	30	22	68
defective or untrapped scullery sinks	18	6	13	36	72
decayed woodwork around scullery sinks	5	1	2	8	16
defective w.c.'s .....	..	2	4	1	7
absence of flush to w.c. ....	..	1	4	3	8
choked "Fowler" closet .....	..	..	1	..	1
foul rainwater cistern	1	..	3	15	19
absence of refuse receptacle	1	..	..	..	1
cellar flooded .....	..	..	..	1	1
House without proper water supply	7	2	7	10	26
" " sufficient drain .....	..	..	..	1	1
Yard paving defective	10	3	25	14	52
(7) Minor defects—					
defective privies (lathehes, seats, etc.).....	57	33	53	44	187
outbuildings in disrepair	1	..	5	27	33
other defects	130	29	75	63	297
(B.) On 291 Tenants for nuisances caused by—					
dirty rooms .....	..	..	7	6	13
dirty yards, privies, etc.	1	3	19	14	37
choked drains and w.c.'s	5	4	15	27	51
privies overflowing.....	1	1	11	..	13
keeping animals .....	..	..	6	6	12
accumulations of filth .....	..	2	9	8	19
stop water overflowing on to street .....	..	..	2	4	6
other nuisances .....	..	1	2	2	5

(C.) On 16 persons responsible for undermentioned:					
Bakehouses : brickwork to be pointed.....	..	..	..	1	1
Butcher's shop : accumulation of sawdust ..	..	..	..	..	1
Farm : foul cesspool	1	..	..	..	1
insanitary cowshed and stable	1	..	..	..	1
Ice cream shop : occupied as a sleeping place ..	..	..	..	..	1
Public houses : choked or defective w.c.	1	..	..	..	1
absence of ventilation vestibule between w.c. and room .....	..	..	..	1	1
defective passage floor.....	..	..	..	1	1
insufficient ventilation, bar passage, and sub-floor .....	..	..	..	1	1
insanitary privy receptacle .....	..	..	..	..	1
Theatres, etc. : dirty .....	..	..	..	1	1
dirty w.c.	1	..	..	..	2
absence of sanitary accommodation.....	..	..	..	..	1
urinal improperly installed .....	..	..	..	..	1
choked drain .....	..	..	..	..	1
accumulation of refuse .....	..	..	..	..	1
Stables : accumulation of manure .....	..	..	1	1	3
Allotments : nuisance caused by burning manure ..	..	..	..	..	1
(D.) On 1 person responsible under Rats and Mice Act .....	..	..	..	..	1
Statutory Notices to Owners—	432	140	587	527	1,686
Under Public Health Act, 1875 .....	..	..	..	..	14
Under Section 18 Housing Act, 1919.....	..	..	..	..	54
Statutory Notices to Occupiers, under Public Health Act, 1875 ..	..	..	..	..	3

TABLE 16.—SUMMARY OF VISITS OF SANITARY INSPECTORS.

NATURE OF VISIT.	W. Clark.	R. W. Weir.	R. Ayre.	W. Hill.	Totals.
General district inspection (including housing inspection and inspection of underground rooms)	3,879	2,756	5,114	3,559	15,308
Inspection of works in progress	1,029	211	1,106	169	2,515
Interviews and appointments	13	417	..	127	557
Investigation of complaints of nuisances	139	137	264	285	825
Testing drains	7	3	20	14	44
Smoke observations .....	..	..	2	..	2
Exhumations	17	..	..	..	17
Special Inspections :—					
Seamen's lodging houses .....	..	164	43	70	277
Common lodging houses .....	..	11	39	69	119
Houses-let-in-lodgings .....	..	..	..	..	..
Van dwellings, etc.	2	32	..	..	34
Re Rent Act Certificates	2	..	11	2	15
Hotels and public houses .....	..	..	8	6	14
Cafes .....	..	..	5	..	5
Picture halls, etc.	31	25	48	10	114
Bakehouses	14	..	30	13	57
Fried fish shops	103	1	44	20	168
Ice cream shops	3	..	32	1	36
Fish-curers premises.....	..	..	1	..	1
Tripery .....	..	..	3	..	3
Piggeries	6	..	2	..	8
Marine store .....	..	..	3	..	3
Stables and allotment gardens ..	391	1,557	56	10	2,014
Re rat repression	41	36	23	33	133
Brickmaking .....	..	..	2	..	2
Other factories	95	..	7	8	110
Other workshops	1	..	12	9	22
Other workplaces .....	..	..	2	1	3
Taking samples with Food Inspector	143	..	..	..	143
" of rag flock.....	..	..	1	1	2
" of mussels .....	..	..	..	1	1
Visits re cases of Infectious Disease :—					
on notification of cases; on removal to hospital; or on disinfection of premises	245	327	182	246	1,000
Re home-treated cases	26	180	34	101	341
" cases of tuberculosis.....	34	60	57	113	264
" contacts of smallpox	13	..	1	7	21
" " scarlet fever.....	5	16	..	6	27
" " cholera	5	..	2	4	11
" " malaria	4	7	6	8	25
" " dysentery	1	..	..	..	1
" " diphtheria.....	..	2	..	..	2
" school reported cases	1	2	..	2	5
Total Visits	6,250	5,944	7,160	4,895	24,249

NOTE.—Details of the visits paid by the Food Inspector and the Shops Inspector are given on pages 87 and 78 respectively.

HOUSING.

The shortage of houses is one of the most pressing needs of the Borough. Only 9 houses were built by private enterprise during the year, including 4 (one of which was a reconstructed Army hut) under the subsidy provisions of Section 1 of the Housing (Additional Powers) Act, 1919.

339 houses on the Council's Cleadon Park Estate were in different stages of erection at the end of the year. Of these 30 were completed.

From a sanitary point of view, probably the greatest defect in the Borough is the amount of overcrowding. One very potent factor in producing the overcrowded state of many houses is the evil of sub-letting. One must await the publication of the census returns in order to gauge its extent, but meantime one cannot help noting the trend of affairs. I have seen even two-roomed dwellings divided into two single-roomed tenements by closing the communicating door and incidentally cutting off the front room tenant from the yard and privy, a condition not conducive to cleanliness. In addition, too many people have to live, eat and sleep within the four walls that form the boundary of their home. In one instance I investigated recently, a man, his wife, and three sons, aged 19, 13 and 11 respectively, were found in one tiny back room, measuring only 10 feet by 7 feet 7 in. In this case, as in many others, the trouble is caused by the mistaken kindness of the original tenant. The owner is not always aware of the fact that the house has been sub-let. Sometimes a tenant sub-lets his house to augment his income, and one has known cases in which the rent from the sub-let portions more than pays the whole rent of the tenement. It is obvious that there are too many tenants for the number of houses available, and no improvement can be effected until there is a large addition of new houses.

No further action was taken with regard to Unhealthy Areas during the year. It is recognised that until other housing accommodation is available it will not be possible to deal with the scheduled areas, since it will be necessary to dehouse a good many people.

There has been rather more difficulty in having repairs to property carried out during the year.

The following tables show the details of the work carried out under the Housing Acts and Public Health Acts during the year. The number of unfit houses in these figures does not include all

those known to exist in the scheduled unhealthy areas and contiguous districts. The houses inspected in 1921 by the Visiting Sub-Committee for Rent Act purposes are excluded.

SUMMARY.

Number of New Houses erected during the year—

(a) Total	39
(b) As part of a municipal housing scheme.....	30
(c) Under subsidy provisions of Housing (Additional Powers) Act, 1919.....	4

*Tene-
Houses. ments.**

1.—Unfit Dwelling-houses.

INSPECTION—

(1) Total number inspected for Housing defects (under Public Health or Housing Acts)	2,251	6,182
(2) Number which were inspected and recorded under the Housing (Inspection of District) Regulations, 1910.....	240	467
(3) Number found to be in a state so dangerous or injurious to health as to be unfit for human habitation.....	23	75
(4) Number (exclusive of those referred to under the preceding sub-heading) found not to be in all respects reasonably fit for human habitation	313	710

2.—Remedy of Defects without Service of formal Notices.

Number rendered fit in consequence of informal action by the Local Authority or their officers	339†	599†
--	------	------

3.—Action under Statutory Powers.

A. *Proceedings under Section 28 of the Housing, Town Planning, etc., Act, 1919—*

(1) Number in respect of which notices were served requiring repairs	54	125
---	----	-----

	<i>Houses.</i>	<i>Tene-ments.*</i>
(2) Number which were rendered fit :—		
(a) by owners.....	44	89
(b) by Local Authority in default of owners .....	..	..
(3) Number in respect of which Closing Orders became operative in pur- sueance of declarations by owners of intention to close.....	1‡	6‡
<i>B. Proceedings under Public Health Acts—</i>		
(1) Number of dwelling houses in respect of which notices were served re- quiring defects to be remedied ..	14	36
(2) Number of dwelling-houses in which defects were remedied :—		
(a) by owners.....	10	20
(b) by Local Authority in default of owners .....	..	..
<i>C. Proceedings under Sections 17 and 18 of the Housing, Town Planning, etc., Act, 1909</i>	Nil.	Nil.

* Included in Houses. † Drainage defects and external
 nuisances excluded. ‡ Pending.

FOOD.

Meat Inspection.

There are no private slaughterhouses in the Borough. All slaughtering in the way of trade must be done at the Public Abattoir.

The following table gives the number of animals slaughtered in the last 8 years. The Abattoir was erected in 1906.

	1914	1915	1916	1917	1918	1919	1920	1921
Beasts	4,269	4,249	5,113	*5,494	4,760	3,858	3,348	3,394
Calves	166	180	46	487	35	357	193	203
Pigs ..	5,302	5,561	4,576	3,980	1,725	2,043	4,184	5,406
Sheep	31,418	29,612	32,463	31,368	23,812	16,911	19,985	32,996
Total	41,155	39,602	42,198	41,329	30,332	23,169	27,710	41,999

* Excluding 2,531 beasts slaughtered for the military authorities.

Visits of Inspection to Premises.

The following is a summary of the visits paid by the Food Inspector to the various premises under his supervision:—

	<i>No. of Premises at end of year.</i>	<i>No. of Visits.</i>
Butchers' shops	173	4,221
Pork butchers' shops	18	
Fresh fish shops	31	
Fried fish shops	74	139
Fish curing places	5	21
Milkshops and dairies	128	247
†Ice cream shops	37	25
Cowsheds.....	4	38
Bakehouses	64	147
Tallow boiling places.....	1	1
*Triperies	2	54
*Gut scraping places .....	..	19

* Exclusive of 2 tripe preparers and 2 gut-scrapers who use premises set apart at the Public Abattoir.

† Number varies considerably; does not include stalls on beach in summer.

These premises are also visited by the Sanitary and Shops Inspectors.

Food Condemned and Destroyed.

The following are particulars of the food condemned and destroyed during the year :—

AT THE ABATTOIR.

Beasts :	9 carcases (all cows : tuberculosis).
	6 forequarters of beef with 2 sets of lungs and 1 liver (4 animals : tuberculosis).
	9 sets of lungs (tuberculosis).
	9 livers (tuberculosis, 2 ; ulcers, 7).
	6 sets of lungs and livers (tuberculosis, 5 ; ulcers, 1).
	2 sets of lungs and heart (tuberculosis).

(In all, 31 beasts were condemned, in whole or in part, on account of tuberculosis).

Calves :	1 carcase (tuberculosis).
Sheep & lambs :	6 carcases (dropsy, 3 ; found dead, 3). 1 liver (flukes). 1 pluck (flukes).
Pigs :	4 carcases (tuberculosis, 2 ; found dead, 2).

OUTSIDE THE ABATTOIR :

The whole of the undermentioned food-stuffs were condemned on account of decomposition or unsoundness, except where otherwise stated :—

Beasts :	1 carcase of bullock (tuberculosis).
	10 $\frac{3}{4}$ cwt. salted beef.
	26 quarters
	5 sides
	4 sirloins
	16 necks
	6 hearts
	13 $\frac{1}{2}$ cwt. beef
	Imported. (Bonetaint, 4 $\frac{1}{2}$ cwt.)
Sheep :	3 carcases (found dead).
	14 carcases : imported.
	6 plucks : imported.
	2 cwt. mutton : imported.
Calves :	6 carcases : imported.
Bacon & Ham :	13 foreshoulders (169lbs.) ham. 4 $\frac{1}{2}$ lbs. bacon.
Rabbits :	156 : imported, 70 ; home killed, 86.

Fish :	small quantities of oysters, lobsters, crabs, prawns, and mussels.
Poultry :	58 ducks.
Eggs :	60.
Tinned Goods :	Beef, 116 tins (about $6\frac{1}{4}$ cwt.)
	Mutton, 11 tins (about 66 lbs.)
	Pigs' feet, 3 tins.
	Condensed milk : 890 tins.
	Tomatoes : 284 tins.
	Pineapple : 32 tins.
	Peaches : 11 tins.
	Aprieots : 7 tins.
	Pears : 4 tins.
	Parsley : 3 bottles.
	Baked beans : 6 tins.
	Fowl : 160 tins.
	Salmon : 18 tins.
	Tongue : 9 tins.
	Ham : 3 tins.
	Veal paste : 2 tins.
	Rabbit : 1 tin.
	Lobster : 1 tin.
	Ketch-up : 1 bottle.
	Pickles : 1 bottle.

Sale of Food and Drugs Acts.

The number of samples taken during the year and submitted to the Borough Analyst was 150. The following are particulars of the samples, results of the analyses, and of the action taken in certain cases.

All the samples of butter, milk, cream and margarine were examined for preservatives, with the results as detailed below.

MILK.

30 samples were taken, five of which were informal samples.

23 were "genuine."

5 were deficient in *natural fat*, as under :—

Deficiency, 3.3 per cent. (two samples); 6.6. per cent.
Letters of caution sent.

Deficiency, 15 per cent. (two samples).—Proceedings
taken, fine of 10s. imposed in each case.

1 was 13.4 per cent. deficient in *non-fatty solids*.—Proceed-
ings taken; fined 10s.

1 was 5.1 per cent. deficient in *non-fatty solids*, and contained *boric acid* in the proportion of 5 grains to a pint.—Proceedings taken; fined 10s.

The standard in milk (milk-fat 3 per cent., non-fatty solids, 8.5 per cent.) is a minimum and is regarded as being low. Where proceedings are taken against vendors who sell milk having a lower percentage of fat and non-fatty solids, a more substantial fine would, in my opinion, be more commensurate with the offence. Small fines do not appear to act as deterrents.

Eleven of the 30 samples of milk were taken in the course of delivery at the railway station. Ten were genuine. One was 6.6 per cent. deficient in milk fat, and as mentioned above a letter of caution was sent to the farmer.

PRESERVED CREAM.

4 samples were taken, informally, and are referred to on page 92.

BUTTER.

17 samples were taken, including one informal sample.

14 were genuine, though one, the informal sample, was of poor quality.

1 contained *boric acid* (0.17 per cent.)—No action.

1 contained 0.7 per cent. *excess water*, and 0.48 per cent. *boric acid*.—Letter of caution was sent.

1 contained 5.8 per cent. *excess water*. Proceedings were taken. At the hearing, the defendant produced a warranty from the firm that supplied him with the butter, and the magistrates dismissed the case. The latter firm also possessed a warranty from a firm in Ireland that supplied them. No further action was taken in the matter.

MARGARINE.

14 samples were taken. Each sample contained *boric acid*, as under:—Proportion, 0.12 per cent., 0.15 per cent. (two samples), 0.16 per cent., 0.24 per cent., 0.25 per cent., 0.26 per cent., 0.30 per cent. (three samples), 0.32 per cent. (two samples), 0.37 per cent., 0.42 per cent.—No action taken.

TINNED PEAS.

1 sample was taken (informally). It was certified to contain copper compounds equivalent as metallic copper to 0.56

grain per lb. of the dried peas, and 0.17 grain per pint of the liquid. The total amount in the tin was equivalent to 0.38 grain of metallic copper.—No action taken.

CINNAMON.

2 samples were taken. One was genuine. The other was certified by the analyst to contain :—

Combustible matter (ash-free bark), 90.35 per cent.

Total mineral matter (left as ash), 9.65 per cent.

Of the 9.65 per cent. of mineral matter, 4 per cent. was sand. The analyst also reported that genuine ground cinnamon should not leave more than 7.5 per cent. of total ash, and of this not more than 2 per cent. should be sand. As the sample was taken informally, a letter of caution was sent to the vendor.

RICE.

4 samples were taken. All were genuine. Two were reported as "free from mineral facing"; 1 as "unpolished: free from extraneous mineral matter"; and the other as containing "mineral facing under 0.5 per cent."

WHISKY.

4 samples were taken, one of which was an informal sample. They were all reported as genuine.

RUM.

2 samples were taken. 1 was genuine. 1 was 51.2 degrees under proof.—A letter of caution was sent.

OTHER SUBSTANCES.

72 samples were taken of the following substances, all of which were genuine :—Pepper, 9; Lard, 8; Vinegar, 7; Cornflour, 5; Oatmeal, 5; Mustard, 4; Ground Cassia, 4; Baking Powder, 4; Tapioca, 3; Flour, 2; Ground Rice, 2; Ground Ginger, 2; Camphorated Oil, 2; Sweets, 2; and 1 each of Tea, Cocoa (informal sample), Coffee, Jam, Sago, Barley, Table Jelly, Ground Macc, Syrup of Senna, Syrup of Figs, Cream of Tartar, Seidlitz Powder, and Olive Oil.

Milk and Cream Regulations, 1912 and 1917.

All the samples of milk (30) taken for the purpose of chemical examination under the Sale of Food and Drugs Acts were examined for the presence of preservatives. One sample contained boric acid. (See page 90).

The following is a statement in detail of the samples of milk and cream taken during the past year :—

1. Milk ; and Cream not sold as Preserved Cream :

	Number of samples examined for the presence of a preservative.	Number in which a preservative was reported to be present and the percentage of preservative found in each sample.
Milk	30	* 1 : 5 grains of boric acid per pint.
Cream ..	Nil.	Nil.

* This sample was also 5.1 per cent. deficient in non-fatty solids. Proceedings were taken and a fine of 10s. was imposed.

2. Cream sold as preserved cream :—

(a) Instances in which samples have been submitted for analysis to ascertain if the statements on the label as to the preservatives were correct.

(i.) Correct statements made	4
(ii.) Statements incorrect	—
(iii.)	
Percentage of preservative found in each sample.	Percentage stated on Statutory label.
0.22 per cent. boric acid.	0.4 per cent.
0.24 „ „	0.4 „
0.40 „ „	0.4 „
0.40 „ „	0.4 „

(b) Determinations made of milk fat in cream sold as preserved cream.

(i.) Above 35 per cent.	4
(ii.) Below 35 per cent.	—

(c) Instances where (apart from analysis) the requirements as to labelling or declaration of preserved cream in Article V. (1) and the proviso in Article V (2) of the Regulations have not been observed Nil.

(d) Particulars of each case in which the Regulations have not been complied with, and action taken.. —

3. Thickening substances. Any evidence of their addition to cream or to preserved cream—Action taken where found —

4. Other observations, if any —

TABLE 18.—SUMMARY OF METEOROLOGICAL OBSERVATIONS, 1971, taken at 9 a.m. daily at the Bents Park and Health Department, South Shields.

MONTH.	Barometer (corrected for elevation, temperature, etc.)	AIR TEMPERATURE.						HYGROMETER			EARTH TEMPERATURE.		RAINFALL. (in inches.)	WIND.														
		Average.			Absolute.			Dry Bulb.	Wet Bulb.	Relative Humidity.	At 1 Foot Depth.	At 4 Feet Depth.		Total Fall.	No. of days rain fell .01" or more.	Amount.	Most in a day.	Average Daily Mileage.	Direction at 9 a.m., Number of Days.									
		Maximum.	Minimum.	Mean.	Maximum.	Minimum.	Date.												N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calm.	
January	29.753	48.9	38.0	43.6	56.6	9	30.0	14	43.9	41.9	85	41.2	42.7	3.71	17	1.35	12	327	..	2	..	1	114	10	3	..	..
February ..	30.259	45.7	36.1	40.7	55.2	23	26.9	4	40.2	38.4	86	39.6	41.5	0.11	6	0.04	6	209	3	..	2	3	2	5	9	3	1	
March	29.857	51.0	38.6	44.8	59.4	24	30.0	6	44.9	41.6	77	42.3	42.6	0.61	15	0.09	25 &	320	..	1	..	1	410	8	7	..	..
April	30.123	51.8	39.4	46.3	66.6	1	28.0	14 & 15	47.6	44.0	76	45.9	45.4	0.94	11	0.38	24	245	3	8	4	2	1	1	6	5	..	
May	29.901	59.0	43.5	52.2	73.6	25	32.1	4	54.0	48.6	67	52.3	49.6	1.21	15	0.27	6 &	197	4	2	1	4	2	8	4	6	..	
June	30.158	62.8	48.2	56.2	82.4	25	42.0	27	57.6	53.0	73?	58.0	54.3	0.62	8	0.28	25	219	11	3	3	..	3	1	6	3	..	
July	30.006	64.6	53.7	59.9	80.2	10	41.4	4	61.3	57.9	80?	61.9	58.1	1.54	14	0.50	28	207	5	1	2	8	..	5	5	4	1	
August	29.847	61.2	51.9	56.8	75.0	1	43.0	29	57.3	55.2	86	59.4	58.2	5.19	23	1.31	29	174	8	1	2	1	2	5	9	2	1	
September ..	30.060	63.8	50.4	57.5	77.0	7	42.9	24	58.4	55.0	80	56.9	56.6	0.80	6	0.64	13	179	3	3	1	1	3	9	7	2	1	
October	30.074	60.7	48.5	54.8	74.2	6	35.5	22	55.2	32.2	80	53.8	55.0	1.91	14	1.15	22	201	2	..	1	2	2	10	10	4	..	
November ..	30.054	45.4	36.7	40.9	59.0	4	27.2	12	40.6	38.4	82	42.6	47.7	2.34	16	1.01	5	236	..	..	2	3	6	13	1	5	..
December ..	29.872	49.6	40.1	44.7	54.4	6	30.5	24	44.4	42.0	82	42.2	44.8	1.43	18	0.25	18	316	..	..	1	..	4	9	13	4	..
AVERAGES ..	29.997	55.4	43.8	49.9	..	..	..	..	50.5	47.4	80	49.7	49.7	..	..	..	..	236	..	..	..	..	..	..	..	..	..
Total .....	..	..	..	..	..	..	..	..	..	..	..	..	..	20.41	163	..	..	..	..	39.21	19	26	30	90	88	48	4

